COBRA/CTBL

REDACTED VERSION

9547838

John Miles

cc: Tom
Ken
Joe
Greg

I have pkg for your review. JHH

Chevron

ORTHO

Chevron Chemical Company
940 Hensley Street, Richmond, CA 94804-0036
FAX (415) 231-8455

Agricultural Chemicals Division

March 23, 1989

Lactofen Technical Package

Mr. Geoffry Pratt
Director Of Operation
Cedar Chemical Corporation
5100 Poplar Avenue, 24th Floor
Memphis, TN 38137

Dear Mr. Pratt:

Please find attached a package of technical information concerning the manufacture of lactofen. This information is being transmitted to Cedar under the terms of the secrecy agreement between Chevron and Cedar dated February 2, 1989. Although the secrecy agreement states you may take up to six months to evaluate this project, we would like to have your proposal no later than June 15, 1989 in order to allow Chevron sufficient time to understand it and eventually have a contract in place by the fourth quarter of this year.

As you can see the information package is quite lengthy, and you may not need all this information to complete your proposal. However, as your people work on the design and estimation, most questions concerning the process can be answered with the information provided. Also, attention has been given to transmitting the latest safety data concerning both the materials and processing used in the manufacture of lactofen. Any questions regarding the information in the package should be directed to me at (415) 231-8220. If a number of issues arise which may best be resolved in a meeting of technical personnel, I suggest your people visit Chevron so we can make available as much expertise as possible.

As previously requested, the basis for your proposal should be a toll manufacturing arrangement with a term of three production years. We are also interested in the affect of lengthening the initial period to five years if it will significantly impact the economics. Chevron will supply and retain title to all raw materials and intermediates, as well as pay for any required off-site disposal of wastes. Cedar would be paid a processing fee for each pound of product produced. The first delivery of finished product will be required in December of 1990 with an estimate volume of 500,000 pounds active. Completion of the total production volume for the first year is required by May of 1991. The estimated product requirements for each of the next two contract years is between 500,000 and 1,000,000 pounds active.

I will be out of the office from March 29 through April 10, 1989. If a question arises during that period, please call Nick Spiridakis at (415) 231-6740. Thank you for your time in evaluating this project, and we look forward to working with you.

Sincerely,

J. A. Telljohann

JAT:kad/Mfg. 37

Attachment

cc: R. A. Eelman - w/o attachment
J. B. Nevin - " "
N. J. Spiridakis - " "

CEDAR CHEMICAL CORPORATION

24th Floor • 5100 Poplar Avenue • Memphis, TN 38137 • 901-685-5348

June 15, 1989

Mr. J. Telljohann
Agricultural Chemicals Division
Chevron Chemical Company
940 Hensley Street
Richmond, California 93804-0036

Dear Jim:

It is June 15, and time to send Cedar's proposal for Lactofen production.

We base our proposal on an operating fee of $9,000 per operating day to include all processing and support services, except raw material supply and waste treatment. Each of the four steps in your process would be started on a per diem basis until Chevron and Cedar agree that the processes have been demonstrated in Cedar's equipment, and that product quality and raw material consumption is acceptable to Chevron. At that time, Cedar would agree to a fixed fee per unit of product, and to meet the demonstrated raw material usage factors.

For this estimate we have assumed that we would produce all of the CTT in a single campaign and then make CTBA in a single campaign, etc. In practice, there would be overlap in the steps in order to most efficiently use equipment and manpower.

We estimate that the first campaign for CTT would take 2.5 months commencing June, 1990. Thus, the cost per unit of CTT would be (75 x 9) ÷ 420,000 = $1.61 if the campaign proceeded as planned. We would use our Unit #2 for this process.

CTBA would require three months in either our Unit #2 or Unit #3. Thus, an estimated unit cost would be (90 x 9) ÷ 440,000 = $1.84.

CTBL would require two months in either Unit #2 or Unit #3 with an estimated unit cost of (60 x 9) ÷ 550,000 = $0.98.

Lactofen would require 3.5 months in Unit #3 at an estimated cost of (105 x 9) ÷ 500,000 = $1.89 per unit.

This would place the total unit cost for Lactofen at roughly $6.00 for 1990.

For subsequent years of the three year contract, the effect of higher volume, higher productivity, and absence of new startups would reduce the processing fee for Lactofen to roughly $5.50 at the $750,000 lb/year level, and $4.50 at the $1,000,000 lb/year level.

It will be necessary for Cedar to invest approximately $400M to modify our equipment. We will require that Chevron guarantee the recovery of this capital in the three year contract. One method of guarantee is a "walkaway fee".

We have conducted steps similar to the first and last process steps and are confident that our equipment can make product and intermediate at the required quality and with the projected cost and productivity. We have no direct experience with the two middle steps, although we have esterified for over ten years and are currently operating a complex transesterification process in a dedicated processing unit. The air oxidation would be the least known technique. The highest degree of uncertainty is in the capital estimate because we have not prepared process flow or P & ID documents. The estimate is accurate only to within 50%, but would not impact the total project cost greatly. The accuracy of the processing cost estimate in year one is highly dependent on the startup experience, but extrapolating from our experience on steps 1 and 2 is probably accurate to within 25%. Estimates for the subsequent years are probably accurate to within 15%.

If waste from the process could be disposed of in commercial deepwells the disposal cost will be roughly $0.32/gallon for solid free aqueous waste. Waste which needs incineration will cost in the range of $0.75 ÷ 1.20/lb. Usually, if Cedar is able to dispose of aqueous waste through its onsite biological treatment system, the cost of treatment is roughly half of outside disposal.

If Cedar were required to purchase raw materials for the project, we would invoice Chevron at our cost plus 5%. We consider nitrogen as a raw material.

I hope the above proposal is sufficiently clear to meet your needs. Please call if clarification is needed. If this preliminary proposal meets your economic guidelines, we will need jointly to study the process and the the production sequencing in more detail to develop a final agreement. We have not proposed costs for a five year agreement because within the degree of accuracy at this stage, meaningful cost adjustments would not be possible.

Sincerely,

Geoffrey L. Pratt
Director Operations
Custom Manufacturing

/kt

cc: J. Miles
W. Eissler

PREPARATION OF LACTOFEN (COBRA)

(b) (4)

[redacted]

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CONFIDENTIAL

FIGURE 1

PROCESS CHEMISTRY

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233 A

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CHEVRON CHEMICAL COMPANY

CONFIDENTIAL

CHARGES BASED ON ONE MOLE OF PRODUCT

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[redacted]

TOTAL

233 B

BR-24176
01-29-1987
POUNDS, J L

PPG INDUSTRIES, INC.
CHEMICAL DIVISION
Barberton, Ohio

Summary of PPG-844 Coupling Technology.

(b) (4)

I. INTRODUCTION

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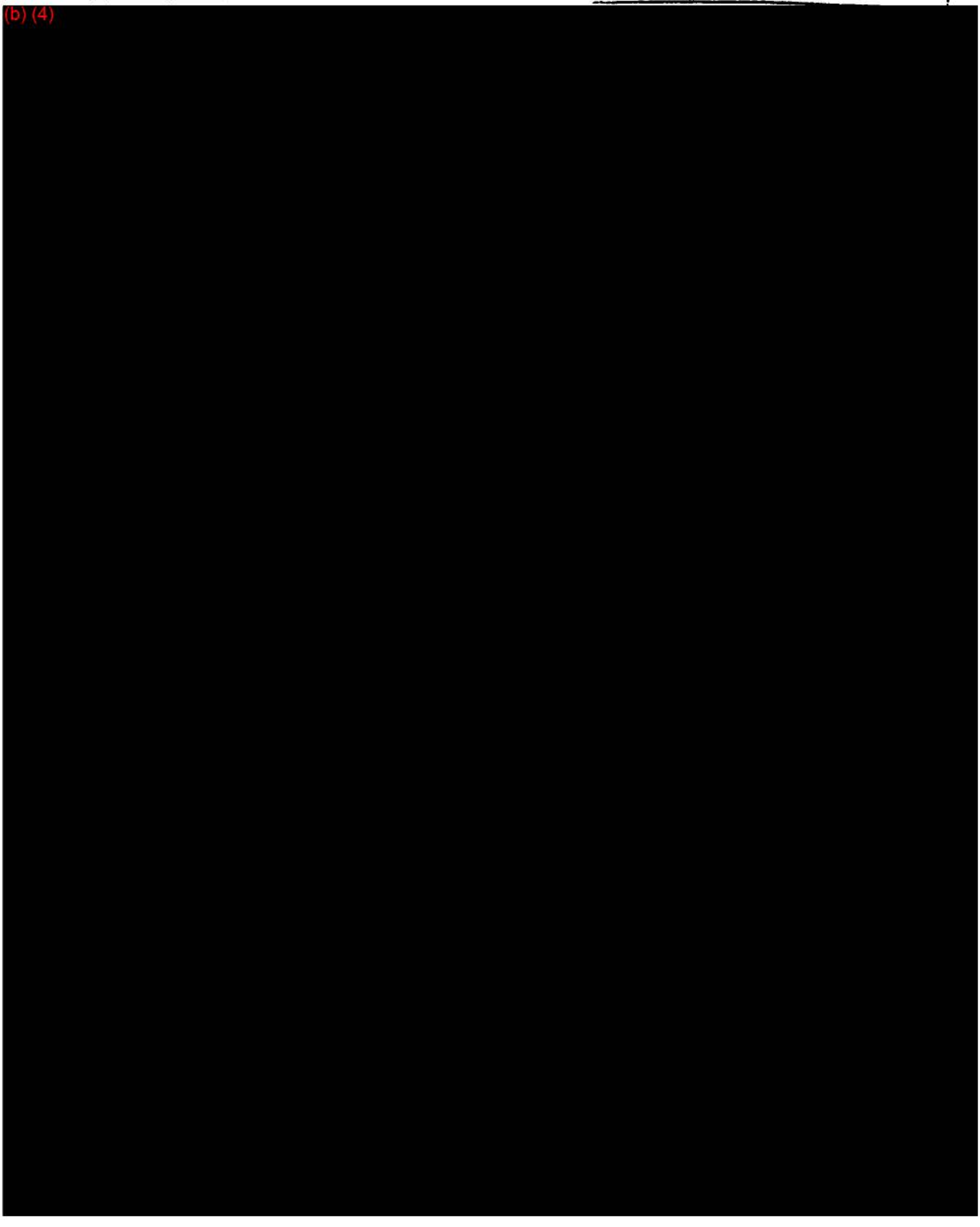

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Sign J. L. Pounds Date 6-19-87

J. L. Pounds

Approved M. J. Brown Date 7/20/87

M. J. Brown

/ab

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CHEVRON CHEMICAL COMPANY

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BRC-24091
01/26/1987
GUZIK, F F

721.33 Co

PPG INDUSTRIES, INC.
CHEMICAL DIVISION
Barberton, Ohio

Summary of PPG-844 Oxidation Technology.

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TABLE OF CONTENTS

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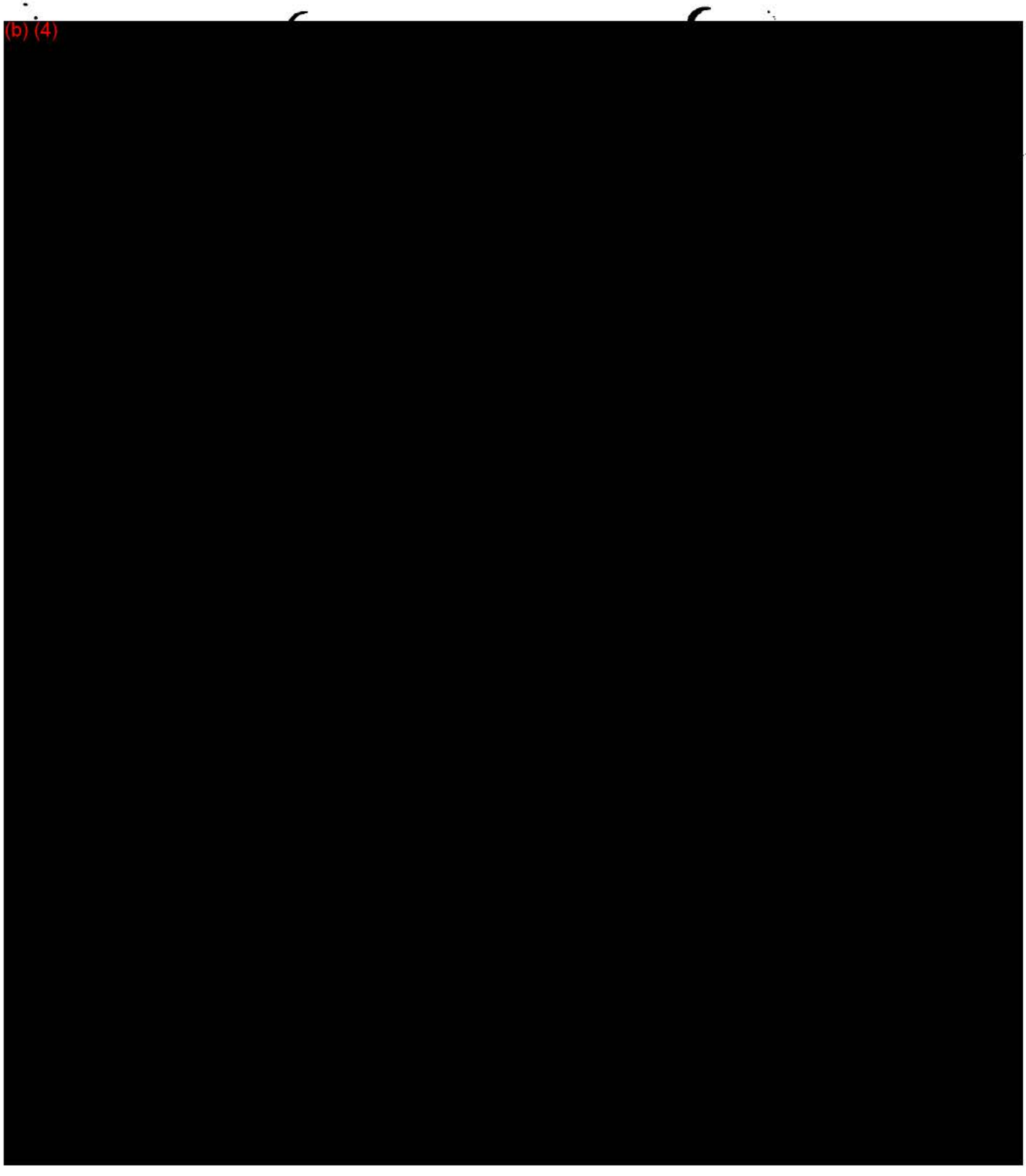

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Signed Frederick L. Guzik Date 2/4/87
F. F. Guzik

Approved J. L. Pounds Date 2/10/87
J. L. Pounds

/ab

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CHEVRON CHEMICAL COMPANY

ORIGINAL SIGNED COPY
KEEP IN FILE

BRC 23633

01-28-1985

GUZIK, F F

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8820112

all as requested

PPG INDUSTRIES, INC.
CHEMICAL DIVISION
Barberton, Ohio

721.33 CO

Summary of PPG-844 Esterification Technology

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Outline

I. Introduction

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CHEVRON CHEMICAL COMPANY

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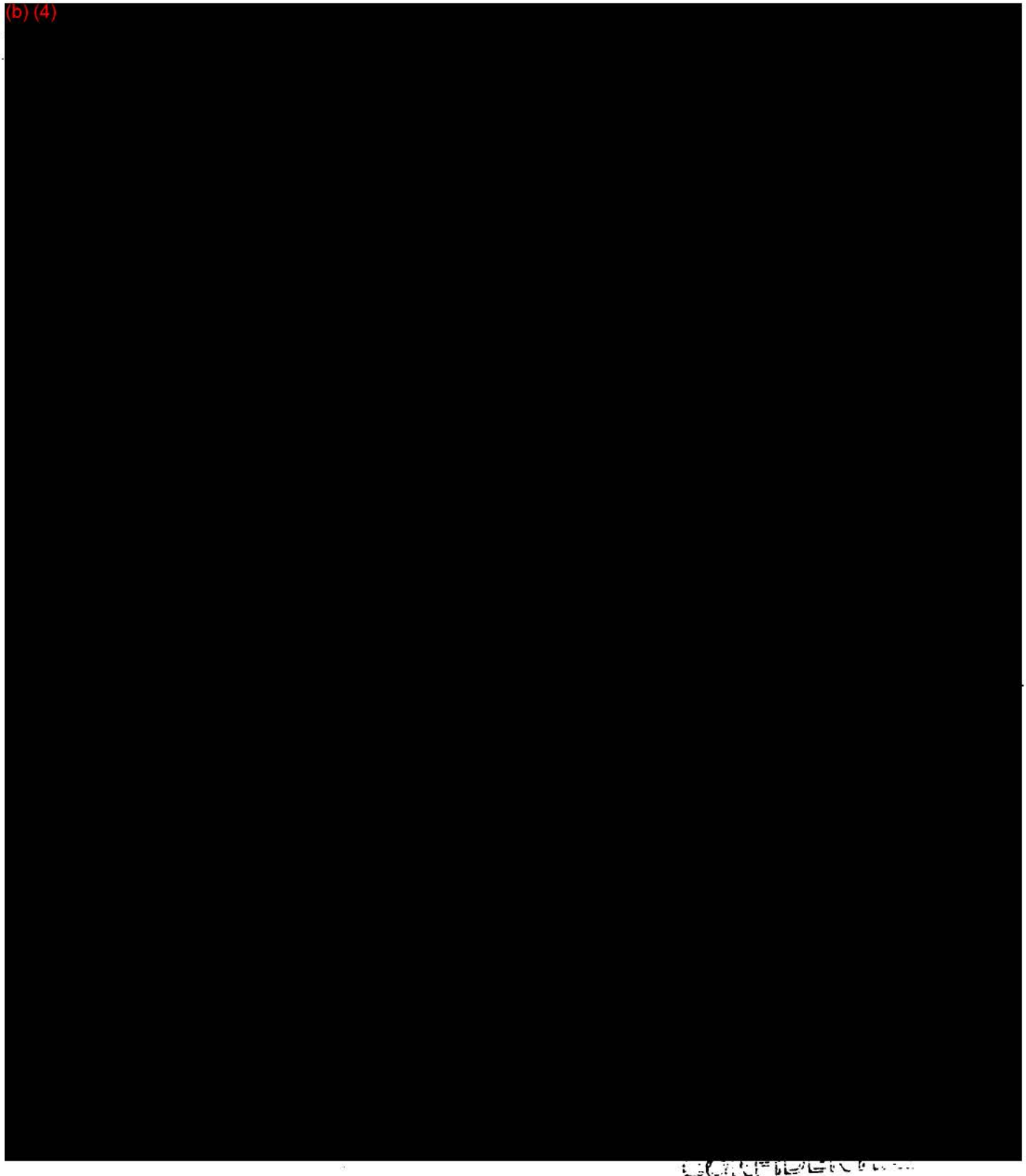

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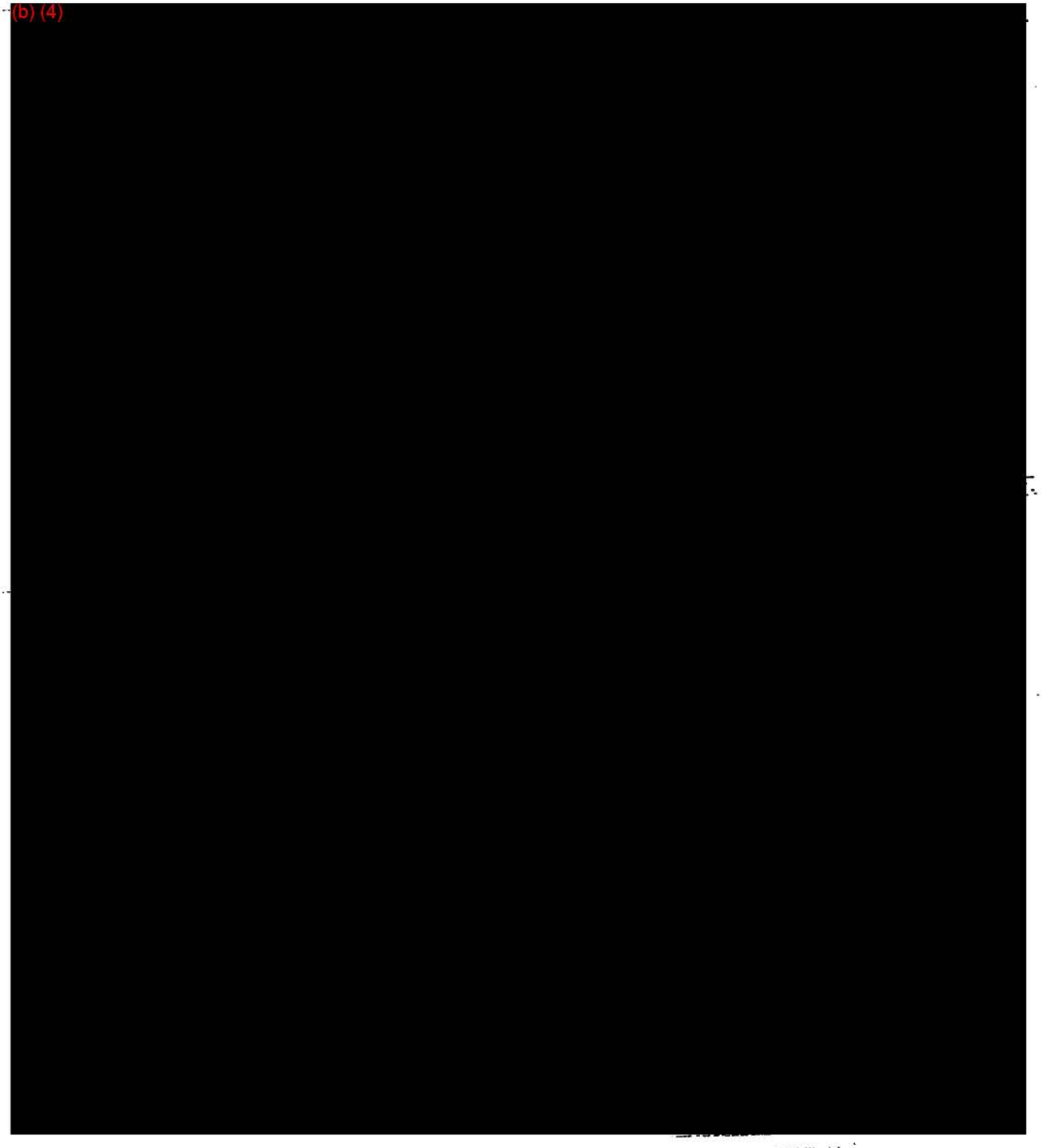

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CHEVRON CHEMICAL CO.

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CHEVRON CHEMICAL COMPANY

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[redacted]

Signed Frederick L. Guzik 3/13/85
F. F. Guzik Date

Approved James A. Cook 3/13/85
J. A. Cook Date

sd

Copy No. Original

BRC-23596

02-19-1985

POUNDS, J L

PPG INDUSTRIES, INC.
CHEMICAL DIVISION
Barberton, Ohio

Diaz Chemical: PPG-844 Nitration Process

(b) (4)

I. Introduction

(b)(4) [redacted]

Signed J. L. Pounds Date 2-22-85

Approved J. K. Cook, Jr. Date 2-26-85

/ab

CONFIDENTIAL
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CHEVRON CHEMICAL COMPANY

PPG-844 NITRATION PROCESS

(b) (4) [redacted]

July - August, 1984

SUMMARY

(b) (4) [redacted]

Marc MacClaren
M. S. MacClaren

T. M. Jenney
T. M. Jenney

cc: J. A. Cook, Jr. (PPG)
S. J. Chiras
G. C. Goodridge
J. W. Churchill

INTRODUCTION

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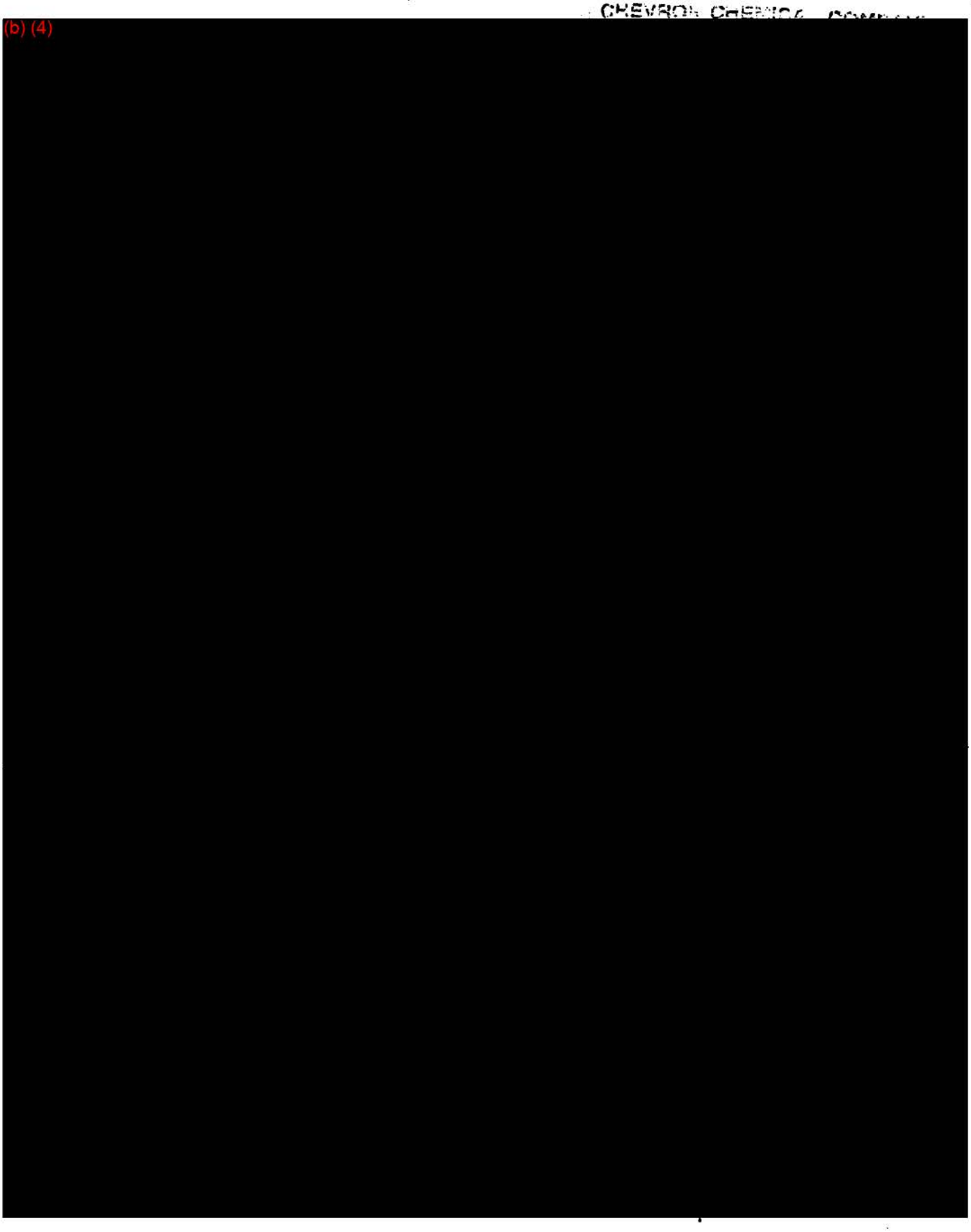

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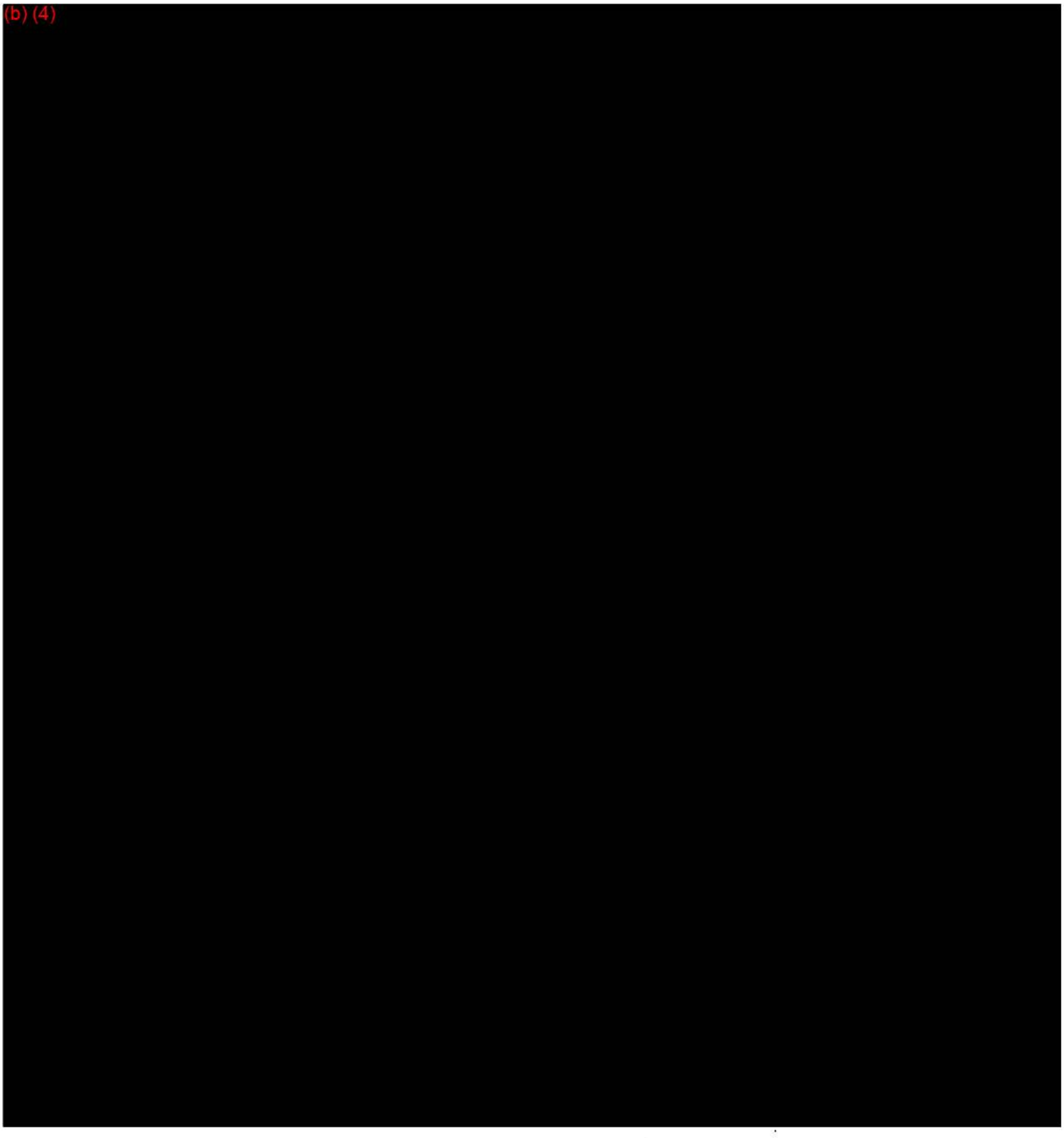

cc. Hoppel

1333 North California Blvd.
Suite 600
P.O. Box 8025
Walnut Creek, CA 94596-8025
(510) 256-2700

VALENT®

→ WNR
Info
DVH
10/19

October 4, 1994

RECEIVED
OCT 07 1994
Ans'd.....

Mr. Geoffrey Pratt
Cedar Chemical Corporation
5100 Poplar Ave. Ste. 2414
Memphis, TN 38137

Dear Geoff:

Attached is your copy of our Lactofen Manufacturing Agreement. Like you, I am also happy this process is over and the real work can begin.

Regards and best wishes,

Gus Jones
Operations Manager

Encl.

cc: L. Coburn (w/contract & cover ltr.)

HGJ/pratt4.ltr

MANUFACTURING AGREEMENT

This Agreement is made this 5 day of Oct, 1994, between

Cedar Chemical Corporation
5100 Poplar Avenue, Suite 2414
Memphis, TN 38137
("Cedar")

with production facilities at

West Helena, AR

and

Valent U.S.A. Corporation
1333 North California Boulevard
Walnut Creek, California 94596
("Valent"), a California corporation.

Recitals:

Cedar is in the business of manufacturing chemicals for itself and/or other companies on a contract basis; and

Cedar possesses the skills necessary to manufacture Lactofen Manufacturing Concentrate (the "Finished Product") conforming to the Specifications set forth on Attachment A which is incorporated into this Agreement by this reference;

Valent desires **Cedar** to manufacture the Finished Product in conformance with the Specifications set forth on Attachment A hereto.

NOW, THEREFORE, intending to be legally bound hereby, the parties hereto agree as follows:

1. **Definitions**

Whenever used in this Agreement, the following terms shall have the meanings set forth below:

1.1 **"Facility"** shall mean that portion of **Cedar's** West Helena, Arkansas plant used to manufacture, store, test and warehouse Raw Material, In-Process Material, or Finished Product;

1.2 **"Finished Product"** shall mean Lactofen Manufacturing Concentrate conforming to the specifications on Attachment A which is released by **Cedar** for shipment;

1.3 **"In-Process Material"** shall mean any Raw Material which has entered the manufacturing process but which is not yet Finished Product, or has not been determined to be either Off-Test Material or Off-Specification Material;

1.4 **"Off-Specification Material"** shall mean any material removed from the Manufacturing process during a manufacturing campaign and which does not meet the Specifications;

1.5 **"Off-Test Material"** shall mean any Finished Product or Raw Materials which do not meet the Specifications;

1.6 **"Process Material"** shall mean any Raw Material, Finished Product, In-Process Material, Off-Specification Material or Off-Test Material;

1.7 **"Raw Material"** shall mean any chemical or substance used during the manufacturing of the Finished Product.

1.8 **"Specifications"** means the specifications for the Raw Materials and Finished Product set forth on Attachment A;

1.9 **"Waste Material"** shall mean any federal, state or locally regulated residual material, chemical or substance treated, stored or disposed of by **Cedar** which is not incorporated into or utilized in the Finished Product by **Cedar** pursuant to the terms of this Agreement.

1.10 "Process" shall mean the proprietary manufacturing process owned by or available to **Valent** which **Valent** represents to be capable of producing Finished Product in the Facility, when such Facility has been modified and improved in accordance with the terms hereof.

2. Quantity

During the term of this Agreement, **Valent** shall supply Raw Materials to **Cedar** sufficient for **Cedar** to manufacture approximately the amounts of Finished Product specified on Attachment B. Valent may request and **Cedar** agrees to manufacture up to an additional 50,000 lbs. of Finished Product, as long as this additional production takes place during the initial continuous campaign.

3. Manufacturing Timing

3.1 Manufacturing of Finished Product shall commence in accordance with the schedule set forth on Attachment B.

3.2 **Cedar** shall not start manufacturing until a **Valent** representative has inspected and approved the condition of the manufacturing equipment and the Facility. After commencement of the manufacturing campaign and completion of the manufacture of the initial batch of the Finished Product, the parties shall meet and confer in order to confirm that the manufacturing specifications provided by **Valent** to **Cedar** will result in the conversion of Acifluorfen to the Finished Product in accordance with the Specifications. Adjustments, if necessary, to the manufacturing specifications shall be made through mutual assistance and by agreement of the parties. Thereafter, **Cedar** warrants, represents and covenants that Finished Product manufactured by **Cedar** hereunder shall conform to the Specifications. The Process to be employed by **Cedar** for the manufacture of Finished Product hereunder, as same may be modified by Agreement of the parties, shall be set forth and attached as Exhibit "A-1" to this Agreement."

4. Material Supply

4.1 **Valent** shall supply to the Facility free of charge all Raw Materials for the manufacturing of Finished Product. If **Cedar** and **Valent** mutually agree, **Cedar** may purchase Raw Materials on behalf of **Valent**. Prices and terms of sale will be agreed upon in writing before purchase.

4.2 **Cedar** shall acknowledge the receipt of **Valent** Raw Materials within seven (7) days thereof by completing a partial tally for each separate shipment of Raw Materials and returning the tally, with all supporting documents (e.g., bills of lading, packing slips) to **Valent**. **Cedar** may, with **Valent's** prior approval, use its own form of acknowledgement in place of the partial tally.

4.3 **Cedar** shall note on the delivery ticket all defects, shortages or damages of Raw Material or obtain a carrier's inspection report at the time of receipt and will promptly notify **Valent** of such defect, shortage or damage within fifteen (15) days of receipt of the Raw Materials.

4.4 Promptly after delivery and before use, **Cedar** shall test all Raw Materials to verify that they meet the Specifications and shall advise **Valent** of any failure of any such Raw Material to meet such Specifications within fifteen (15) days after delivery. Failure to notify **Valent** of any such defect shall constitute a waiver thereof by **Cedar**. **Cedar** shall retain the samples of all Raw Materials tested for one (1) year. Test methods to be employed by **Cedar** are included in Exhibit A.

5. Manufacturing Fee

5.1 The Manufacturing Fee during the manufacturing campaign shall be $14,000/day for each day or partial day of production hereunder plus a lump sum payment of $70,000 for plant preparation and clean-up, which lump sum shall be due upon completion of the delivery of the Finished Product to Valent. "Manufacturing Fees shall be invoiced in accordance with Paragraph 6 of this Agreement. The plant preparation and cleanup fee shall be invoiced at the conclusion of the initial campaign hereunder, and shall be due and payable by **Valent** within thirty (30) days from date of invoice."

5.2 **Valent** will reimburse **Cedar** its actual costs (currently estimated to be $50,000) for capital improvements to instrumentation and equipment at the Facility which the parties believe to be required for production of Finished Product at the Facility. **Cedar** will carry out such improvements in accordance with plans and specifications as shall be approved by **Valent**. the cost of such improvements shall be invoiced by **Cedar** at such time as the improvements shall have been completed, which invoice shall be due and payable by **Valent** within thirty (30) days from the date of invoice. **Cedar's** invoice shall include reasonable documentation, including copies of supplier's invoices, to account for the expenditure of funds so invoiced.

6. Billing, Terms and Taxes

6.1 The Manufacturing Fee shall be invoiced to **Valent** on the first day of each month for the prior month's production.

6.2 **Valent** will assume responsibility and pay all tangible personal property taxes with respect to the Raw Materials and Finished Product while in **Cedar's** custody.

6.3 The manufacturing fee for the Finished Product includes all Federal, State and Local taxes, duties and other governmental charges and fees that may hereafter be imposed on any aspect of the processing of the Finished Product, except those specified in Paragraph 6.2..

6.4 Payment shall be net thirty (30) days from the date of the invoice.

7. Delivery

7.1 The Finished Product shall be shipped by **Cedar** in accordance with directions from **Valent** at Valent's **expense**.

7.2 Each shipment of the Finished Product will be accompanied by a certificate of analysis in the format and containing the information set forth on Attachment C. Test methods are included in Attachment C.

7.3 **Cedar** shall be responsible for assuring that all vehicles, including railcars, used to ship Finished Product are properly loaded and placarded and that the transporter is provided with a Material Safety Data Sheet ("MSDS") for the Finished Product.

8. Material Allowances

8.1 During the manufacturing campaign, it is anticipated that there may be variances between the quantity or weight of Raw Materials delivered to **Cedar** and the Finished Product delivered to **Valent**. Recognizing that usage ratios have not been developed at the date of the execution of this Agreement, the parties agree that **Cedar** shall attempt to process the Finished Product in conformity with such usage ratios described on Attachment D.

8.2 At the end of the initial campaign, the parties shall meet and confer in order to reach agreement on appropriate usage ratios applicable to any future production campaigns. thereafter, at the end of each future manufacturing campaign, if any, variances in excess of the agreed allowances will be charged to **Cedar** at an amount equal to **Valent's** cost plus freight. **Valent** will permit **Cedar** to audit its Raw Material costs upon reasonable notice for purposes of this Paragraph.

9. Health and Safety

9.1 Process Materials and Waste Material (collectively the "Materials") may be or become hazardous. **Cedar** shall inform and familiarize its employees, agents, and contractors who may handle, treat, store, transport, or dispose of the Materials of all hazards and precautions for safe and proper use, storage, treatment, labeling, transport, disposal, and emergency procedures in case of an accident or incident pertaining to such Materials. **Cedar** shall comply with all federal, state and local laws and regulations relating to the handling, use, storage, transportation and disposal of the Materials, containers for the Materials and equipment.

9.2 **Cedar** shall provide to its personnel with and enforce the proper use of adequate personnel protective equipment.

9.3 Prior to the start of manufacturing of the Finished Product, **Cedar** shall prepare and deliver to **Valent's** Manager Q/A contingency plans to handle any reasonably foreseeable emergency situations (including, but not limited to, fire, flood, spills).

9.4 **Cedar** shall report to **Valent's** Manager Q/A each OSHA recordable incident involving any material handled pursuant to this Agreement within twenty-four (24) hours of the occurrence of such incident.

10. Quality Control

10.1 Finished Product shall conform to the Specifications. Prior to each shipment of the Finished Product, **Cedar** shall conduct such tests and analyses and employ such quality control procedures to ensure that all Finished Products supplied by **Cedar** and work performed hereunder, shall comply with the Specifications. **Cedar** shall retain the samples of the Finished Product tested for one (1) year.

10.2 **Cedar** shall immediately send copies of all test results obtained to **Valent**.

10.3 **Cedar** will not ship any Finished Product until sample and test results are approved by **Valent**, provided however, that approval shall not have the effect of excluding or limiting any remedy **Valent** may have for the failure of the Finished Product to comply with the Specifications or **Cedar's** breach of this Agreement.

10.4 Prior to manufacturing, **Cedar** shall prepare for **Valent's** approval a quality assurance program specifying the procedures **Cedar** will follow to prevent contamination of the Finished Product with other Finished Products or materials. The program shall include, but not be limited to, equipment cleaning, analytical, warehousing and operating procedures.

10.5 At **Valent's** request, **Cedar** shall allow a **Valent** representative to visit **Cedar's** Facility to inspect **Cedar's** equipment, operating and quality control procedures, health and safety procedures, and related documentation, and to perform such tests and inspections as **Valent** deems necessary. **Cedar** shall, at its expense, implement recommendations made by such **Valent** representative as shall be approved by **Cedar**, it being understood that if any recommendation made by **Valent** involves substantial expenditure of funds, **Cedar** shall withhold its approval unless **Valent** shall agree to pay or reimburse **Cedar** for such expenditure. If **Valent** is unwilling to reimburse **Cedar** and **Cedar** is unwilling to implement **Valent's** recommendations then **Valent** shall have the right to terminate this Agreement.

10.6 At **Valent's** request, **Cedar** shall participate in an inter-laboratory study to establish **Cedar's** ability to analyze Finished Product and to establish the amount of inter-laboratory variation to be expected.

10.7 With each group of process samples assayed, **Cedar** shall concurrently assay a reference sample supplied by **Valent**. Reference sample results shall be reported with process results.

11. Confidentiality

11.1 **Cedar** shall keep confidential and not disclose any sales, marketing or financial information, proposals, plans, product end-use information, specifications, analytical methods, descriptions of reactions, conditions, formulae, materials, customer lists, trade secret information, data, materials processes, manufacturing and technical know-how or any other confidential or proprietary information supplied by **Valent** ("Confidential Information") strictly confidential, and shall not use the Confidential Information for any purpose other than in accordance with this Agreement, nor disclose the Confidential Information to anyone without **Valent's** prior written approval. **Cedar** shall cause its employees and **Cedars** to adhere to the terms of this Paragraph 11.1. This obligation shall survive termination of this Agreement.

11.2 Upon termination of this Agreement, **Cedar** shall promptly return to **Valent** all Confidential Information whether stored electronically, in written form or otherwise and any copies thereof made by **Cedar**.

11.3 The foregoing obligations of confidentiality, non-use and non-disclosure shall not apply to any information which is now, or hereafter becomes, through no act or failure to act on the part of **Cedar**, part of the public knowledge or literature, or was rightfully in **Cedar's** possession prior to disclosure by **Valent** or which **Cedar** acquires subsequent to disclosure by **Valent** from a third party under no secrecy obligation to **Valent**.

11.4 **Valent** shall own and **Cedar** hereby grants, transfers and assigns to **Valent** all right, title and interest in and to any process and technical information or know-how developed by **Cedar** as it relates to production of Finished Product defined by this Agreement. Cedar will not use or disclose any portion or all of this process and technical information for any purpose other than the manufacturing of the Finished Product described herein.

12. Accounting

12.1 **Cedar** shall send to **Valent** a monthly report of the daily usage of Raw Material and the daily production of Off-Test Material and Finished Product from the previous month.

12.2 On the last business day of each month, **Cedar** shall take a physical inventory of all Raw Materials, Off-Test Materials, Off-Specification Materials and Finished Product. No later than the first Tuesday of each month, **Cedar** shall send to **Valent** an inventory activity report for the previous month, which shall be dated and signed by **Cedar**.

13. Environmental Protection and Waste Management

13.1 **Cedar** shall employ such controls, procedures and inspections to assure that all Process Materials and Waste Materials are stored, treated and disposed of strictly in accordance with all federal, state and local laws, regulations and ordinances and in a manner to assure protection to public health and the environment. **Cedar** shall deliver monthly in writing to **Valent** documentation showing the treatment, storage, shipment and disposal of all Waste Materials for the previous month, including copies of bills of lading, waste manifests, or other documents related to the storage, treatment, disposal and shipment of Waste during the previous month. Off-site disposal of Waste Material shall be carried out in such manner as shall have been approved in writing by Valent which approval shall not have been reasonably withheld.

13.2 **Cedar** shall immediately notify **Valent's** Manager Q/A of any reportable spills or releases of Process Material or Waste Materials into the atmosphere, including but not limited to sewers, ground or drainage system or of any fires at the Facility. Immediate notice of any such spills or releases will also be given to **Valent's** hotline at 1-800-892-0099.

13.3 **Cedar** shall invoice **Valent** for **Cedar's** costs of off-site treatment, disposal, storage and shipment of Waste Materials and such invoices shall include satisfactory documentation of the costs incurred by **Cedar**. Such invoices shall be due and payable by **Valent** within thirty (30) days from the date of invoice.

14. Warranties, Representations and Covenants

14.1 After commencement of the manufacturing campaign and completion of the manufacture of the initial batch of the Finished Product, the parties shall meet and confer in order to confirm that the process provided by **Valent** to **Cedar** will result in the conversion of Acifluorfen to the Finished Product in accordance with the Specifications. Adjustments, if necessary, to the manufacturing specifications shall be made through mutual assistance and by agreement of the parties. Thereafter, **Cedar** warrants, represents and covenants that Finished Product manufactured by **Cedar** hereunder shall conform to the Specifications and that the Finished Product will not, on the date of shipment, be adulterated within the meaning of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA).

14.2 **Cedar** warrants, represents and covenants that its operations under this Agreement shall be in complete compliance with all applicable governmental laws, ordinances, rules, regulations, executive orders and guidelines, including but not limited to all laws, regulations and ordinances for the storage, treatment, disposal, and shipment of Waste Materials generated or occurring as a result of this Agreement, and in the event **Cedar** fails to fully comply with all such laws, regulations and ordinances, **Cedar** shall be deemed to have and shall assume title to the Waste Material and such title shall be immediately conveyed to and vest in **Cedar** for such Waste Material. The foregoing provisions shall, however, have no application to the acts or omissions of a third party contractor in the event such contractor is selected and approved by **Valent** for off-site disposal of Waste Material.

14.3 **Cedar** warrants, represents and covenants that it has experience, skill and expertise in manufacturing, packaging and handling pesticide products. Further, **Cedar** warrants, represents and covenants that it has read and understands the information, including the Material Safety Data Sheets, furnished to **Cedar** by **Valent** relating to the health, safety, and environmental hazards, dangers, precautions and proper procedures to be used in the receipt, handling, manufacturing, treatment, storage, shipment and disposal of and exposure to the Finished Product and to the Process Materials and Waste Materials and has made such further inquiries of **Valent** as it deems necessary to supplement such written information. Further, **Cedar** warrants, represents and covenants that it will inform all of its employees, agents and contractors who may be exposed to or may handle, manufacture, treat, store, transport, package or dispose of any such materials of the hazards and of the proper and safe procedures for handling, manufacturing, packaging, treating, storing or disposing of such materials in order to protect all such persons, property and environment from loss, injury, death or damage.

14.4 **Valent** warrants that Raw Materials which meet the specifications are adequate to produce Finish Product. **Valent** also represents and warrants that to the best of **Valent's** knowledge, **Cedar's** use of the Process will not infringe any patent, and agrees to indemnify **Cedar** and save it harmless against any such patent infringement claim, including defense costs of same. **Valent** makes no other warranties hereunder which meet the Specifications are adequate to produce Finished Product in accordance with the Specifications in attachments. **Valent** MAKES NO OTHER WARRANTIES HEREUNDER, WHETHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTIES ARISING FROM A COURSE OF DEALING OR USAGE OF TRADE, AND NONE SHALL BE IMPLIED, as to the quality of Raw Materials, or Finished Product.

14.5 **Cedar** MAKES NO OTHER WARRANTIES HEREUNDER, WHETHER OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTIES ARISING FROM A COURSE OF DEALING OR USAGE OF TRADE, AND NONE SHALL BE IMPLIED, as to the quality of Raw Materials, or Finished Product.

15. Off-Test Material and Off-Specification Material

15.1 All Off-Test Material and Off-Specification Material shall be identified and shall be segregated at all times from, and held in an area separate from, the Finished Product.

15.2 **Cedar** shall perform such tests and analyses as necessary to characterize the Off-Test Material and/or the Off-Specification Material to determine the corrective action required.

15.3 **Cedar** shall at its own cost and expense correct all Off-Test Material and/or Off-Specification Material during the same manufacturing campaign which produced such Off-Test Material and/or Off-Specification Material except as provided in Paragraph 15.5.

15.4 If **Cedar** fails to correct any Off-Test Material and/or Off-Specification Material prior to the end of the manufacturing campaign during which such Off-Test Material and/or Off-Specification Material was produced, **Cedar** shall pay **Valent** $.02 for each pound of Off-Test Material and/or Off-Specification Material for each thirty (30) day period or portion thereof, commencing sixty (60) days after the last day of the manufacturing campaign during which the Off-Test Material and/or the Off-Specification Material was produced.

15.5 In the event that the failure of the Finished Product to meet the Specifications is due in whole or part to defects in the Raw Material furnished by **Valent** that could not reasonably have been discovered by **Cedar, Valent** shall bear the costs associated with the remanufacturing the Finished Product or the diminution in value of said Finished Product.

16. Indemnity

16.1 **Cedar** shall indemnify, defend and hold **Valent** harmless against any and all liability, claims, demands, costs, loss, damages, penalties, fines or expenses (including reasonable attorneys fees), including without limitation, claims by an employee of **Cedar**, or for loss or damage to property, including property of **Cedar**, arising out of **Cedar's** performance or lack of performance under this Agreement, **Cedar's** ~~compliance~~ with federal, state and local laws and regulations, except to the extent such loss, damage, injury or liability is the result of **Valent's** negligence, breach of its representations or warranties hereunder, or its willful misconduct. failure to comply GRP

16.2 **Valent** shall indemnify, defend and hold **Cedar** harmless against any and all liability, claims, demands, costs, loss, damages, penalties, fines or expenses (including reasonable attorneys fees) including without limitation claims by an employee of **Valent** or for loss or damage to property, including property of **Valent**, arising out of the handling, transportation, storage or use of Process Materials when outside of the custody and control of **Cedar** or of Finished Product after delivery of same to **Valent** hereunder, ~~**Cedar's non-compliance**~~ with federal, state and local laws and regulations, except to the extent such loss, damage, injury, or liability is the result of **Cedar's** negligence, breach of its representations or warranties hereunder, or its willful misconduct. Valent's failure to comply GRP

16.3 Notwithstanding any other provision of this Agreement, **Cedar** shall indemnify, defend and hold harmless **Valent** against any and all liability (whether at law or in equity), for claims, demands, losses, damages, fines, penalties, or expenses (including attorney's and expert consultant fees) arising out of (i) **Cedar's** non-compliance with federal, state and local environmental laws and regulations, and (ii) costs of response, including but not limited to costs of investigation and remediation, relating to unauthorized releases of hazardous substances (as that term is defined in 42 USC 9601 (14) of the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and state counterpart statutes) furnished by **Valent** to **Cedar** pursuant to this Agreement while such substances are under the custody, care or control of **Cedar** or its Agents. The foregoing notwithstanding, **Cedar's** indemnity obligations shall not extend to matters arising out of off-site disposal of Waste Material carried out by third parties in the event such contractor is selected and/or approved by **Valent**.

16.4 The terms of this Article 16 shall survive the termination of this Agreement.

17. Insurance

17.1 **Cedar** shall, at its own expense, carry and maintain the following insurance with companies and on terms satisfactory to **Valent**:

i. Worker's compensation and Employer's Liability Insurance as prescribed by applicable law;

ii. Comprehensive General Liability (Bodily Injury and Property Damage) Insurance of not less than $5,000,000.00 combined single limit per occurrence, including coverage for Contractual Liability to cover liability assumed under this Agreement, products/completed operations, and premises/operations. Such insurance shall be written on an occurrence basis or if on a claims made basis. The policy coverage period shall include claims arising from the performance of this Agreement;

iii. Automobile bodily Injury and Property Damage Liability Insurance, extending to owned, non-owned and hired vehicles and trailers used in the performance of this Agreement, including coverage for sudden and accidental pollution losses arising out of an upset or overturned vehicle or trailer.

iv. All Risk Property Insurance covering the Process Materials while in **Cedar's** custody, possession or control, naming **Valent** as a loss payee;

17.2 The requirements of this Section 17 do not limit or derogate the obligations in Sections 14 and 16.

17.3 The above insurance shall include a requirement that **Valent** be provided with thirty (30) days prior notice of cancellation or material change. The insurance specified in subparagraph 17.1 (ii) and (iii) shall name **Valent** as an additional insured insofar as its interests are affected by this Agreement. Prior to the start of any manufacturing or packaging under this Agreement, and in any case not more than thirty (30) days after the execution of this Agreement, **Cedar** shall deliver to **Valent** evidence of such insurance.

18. **Compliance and Affirmative Action**

Cedar shall comply with all applicable laws and regulations, including, without limitation, all federal and state laws regulating the transportation, handling and storage of hazardous material, and the following clauses contained in the Code of Federal Regulations and incorporated herein by reference: 48 C.F.R. 52.203-6 (Subcontractor Sales to Government); 48 C.F.R. 52.219-8, 52.219-9 (*Utilization of Small and Small Disadvantaged Business Concerns*); 48 C.F.R. 52.222-26 (*Equal Opportunity*); 48 C.F.R. 52.222-36 (Handicapped Workers); 48 C.F.R. 52.223-2 (Clean Air and Water); and 48 C.F.R. 52-223-3 (Hazardous Material Identification and Material Safety Data). **Cedar** has provided a Certificate of Nonsegregated Facilities to **Valent** which is still valid and in effect. **Cedar** agrees and covenants that none of its employees, or employees of its subcontractors, who provide services to it pursuant to this Agreement are unauthorized aliens as defined by the Immigration Reform and Control Act of 1986.

19. **Title and Risk of Loss**

19.1 Subject to the provisions of Paragraph 14.2, title to and all other incidents of ownership of the Process Materials shall at all times be and remain in **Valent**, including the time the Process Materials are in **Cedar's** possession, custody or control at the Facility.

19.2 While any and all Process Materials are in the possession, custody or control of **Cedar**, **Cedar** agrees to bear the risk of any loss or damage arising from the possession, custody or control of the Process Materials. Process Materials shall be deemed to be in the possession, custody or control of **Cedar** upon delivery of the Raw Materials to the Facility and the Process Materials shall remain in **Cedar's** possession, custody or control until loaded or to **Valent** or to **Valent's** carrier FOB the Facility.

19.3 **Cedar**, shall appropriately mark any tank or other container in which Process Material is held to reflect the ownership of such Process Material by **Valent**. **Cedar** shall not enter into or execute any agreement which purports to encumber any asset of **Cedar** unless such agreement clearly informs the other parties thereto that Process Material is the property of **Valent** and not of **Cedar**. At **Valent's** request, **Cedar** shall execute such additional documents as are necessary to evidence **Valent's** ownership interest and cooperate with **Valent** in the filing or recordation of such documents as appropriate. **Cedar** shall not permit, cause or impose any lien, claim or encumbrance against **Valent's** Process Materials.

20. **Relationship to the Parties**

Cedar, in its performance hereunder, shall not be deemed to be a partner, joint venturer, agent, or representative of or with **Valent**. Each party hereto is an independent entity, retaining complete control over and responsibility for its own operations and employees. Nothing herein shall be construed to grant either party hereto any right or authority to assume or create any obligation on behalf or in the name of the other, or to accept summons or legal process for the other, or to bind the other in any manner whatsoever.

21. **Conflict or Interest**

No director, employee or agent of **Cedar** *shall give or receive any commission, fee, rebate, gift, or entertainment of* significant cost or value in connection with the order, or enter into any business arrangement with any director, employee or agent of **Valent** or any affiliate other than as a representative of **Valent** or its affiliate, without prior written notification thereof to **Valent**.

22. **Records and Audits**

22.1 **Cedar** shall maintain true and correct records in connection with this Agreement and shall retain such records for no less than two (2) years from the date of the termination of this Agreement.

22.2 **Valent** shall have the right, at reasonable intervals during regular business hours, to review the appropriate books, records and inventories, to conduct such tests and inspections and to interview personnel of **Cedar** as **Valent** deems necessary, for the purpose of verifying the compliance by **Cedar** with the provisions of this Agreement.

23. **Contingencies**

23.1 Except for the obligations provided in Sections 9, 11, 13, 14, 16 and 17, the performance of the parties required by this Agreement shall be suspended for a reasonable time period to the extent that such obligations and performances are delayed, prevented or restricted by an unforeseeable cause beyond the reasonable control of the party affected, including fire, flood, and other natural catastrophes, strikes and labor disputes, failure or shortage of source of Raw Material, power or supplies, or failure or shortage of transportation. If a party is delayed because of such a contingency, that party shall notify the other party immediately in writing of such contingency. The suspension of any obligation shall not affect any right accrued under this Agreement.

23.2 New governmental actions which materially and adversely affect **Cedar's** ability to produce Finished Products hereunder, or which would impose material unforeseen expenditures shall also excuse or suspend **Cedar's** future performance hereunder.

23.3 New Governmental actions which materially or adversely affect **Valent's** ability to market or sell Finished Product.

24. Term and Termination

24.1 Except as provided in Paragraph 24.2, the term of this Agreement shall be for one year from date of execution.

24.2 Upon the occurrence of any of the following events, this Agreement can be terminated immediately by **the party not in default upon notice to the other:**

i. The filing of a petition in bankruptcy or reorganization, voluntary or involuntary, by or against the other party, which petition is not dismissed or set aside forty-five (45) days following the date of filing;

ii. An assignment of assets of such other party for the benefit of creditors or an appointment of a receiver to take possession of such party's assets;

iii. Default by such other party in its obligations under this Agreement, which default shall not have been cured within sixty (60) days after such party's receipt of notice of such default from the party not in default.

24.3 Upon termination of this Agreement, Cedar shall return to **Valent** all Process Material remaining in its control and possession. **Cedar** shall immediately dispose of all Waste Material in accordance with the requirements of Section 13 of this Agreement.

25. Miscellaneous

25.1 This Agreement may not be assigned by either party hereto without the prior written consent of the other party, and such consent may be withheld at the sole discretion of said party. Notwithstanding the foregoing, this Agreement is binding upon the parties successes and assigns.

25.2 All notices, reports, or information requirements hereunder, unless otherwise specified, shall be sent to the following addresses.

To **Valent U.S.A. Corporation**
1333 North California Blvd.
Walnut Creek, California 94596
Attn: Manager, Supply and Distribution

To **Cedar** Chemical Corporation
5100 Poplar Ave
Memphis, TN 38137
Attn: Vice President, Custom Mfg.

25.3 Notices required under Paragraph 23.3 shall be delivered in person or sent by facsimile, registered or certified mail, U.S. Mail return receipt requested and shall be deemed to have been given on the date on which the notice has been delivered by hand or facsimile with the confirmation or forty-eight (48) hours after the date deposited in registered or certified U.S. mail.

25.4 This Agreement constitute the entire agreement between the parties with respect to the manufacturing of the Finished Product during the term hereof. The parties hereto recognize that from time to time purchase orders, bills of lading, delivery instructions, invoices and similar documentation will be transmitted by each party to the other to facilitate the implementation of this Agreement. Any terms and conditions contained in any of those documents which are inconsistent with the terms of this Agreement shall be void and unenforceable.

25.5 No amendment to or modification of this Agreement and no waiver of any provision hereof, shall be effective unless it is in writing and signed by both parties.

25.6 The captions in this Agreement, including the attachments hereto, are for convenience only and shall not be considered a part of or affect the construction or interpretation of any provision of this Agreement.

IN WITNESS WHEREOF, the parties hereto have executed and delivered this Agreement as of the date first above written:

Cedar

By _____

Title Vice President, Custom Manufacturing

Date September 23, 1994

Valent

By _____

Title President & CEO

Date October 4, 1994

CEDAR CHEMICAL CORPORATION

24th Floor • 5100 Poplar Avenue • Memphis, TN 38137 • 901-685-5348

September 26, 1991

Ms. Anita Dale, Product Manager
Valent
1333 North California Blvd.
P. O. 8025
Walnut Creek, CA 94596-8025

Dear Anita:

Attached are two original contracts for the production of CTBL which have been signed by Cedar. Please have these contracts signed by Valent and return one original to me.

As we discussed today, our two companies have agreed that the rated capacity of the CTBL processing equipment to be installed in Cedar's No. 1 processing unit according to the new P&IDs dated 9/5/91 is equivalent to the system proposed in Cedar's No. 4 processing unit and described by the P&IDs shown in Exhibit F of the contract. As a result, there will be no need to prorate the daily processing fee as shown in paragraph 4.1.2.

The engineering work appears to be progressing well towards our targeted start up date with the greatest unknown being the issuance of the air permit. We will keep you advised on progress in this area.

Sincerely,

Geoffrey L. Pratt
Director of Custom Manufacturing

mc

Enclosure

cc: A. Malone - w/o enclosure
R. Tomblin - w/o enclosure
G. Pearce - w/o enclosure

Chevron Chemical Company agrees that no pro-rating of cost is necessary

Norman R. Angell 10/4/91
signed date

Chevron Chemical Company
6001 Bollinger Canyon Road, San Ramon, California
Mail Address: P.O. Box 5047, San Ramon, CA 94583-0947

Agricultural Chemicals Division

October 10, 1991

CTBL Toll Contract

Mr. Geoffery L. Pratt
Cedar Chemical Corporation
5100 Poplar Avenue, 24th Floor
Memphis, TN 38137

Dear Geoff:

Please find enclosed a signed copy of the contract for production of CTBL at your facility. Since it was developed as an agreement between Chevron and Cedar, Chevron has executed it instead of Valent. As soon as the document is drawn, we will assign this agreement to Valent and will notify you of such assignment.

Once the final P & ID are available they should replace the preliminary set which is currently attached. Thank you for your timeliness in both assembling the contract and preparing for operations.

Sincerely,

J. A. Tell-Johann
Product Manager

Enclosure

cc: Mr. N. R. Angell
Mr. D. A. Newell

TOLL PROCESSING AGREEMENT
CTBL

BETWEEN

CHEVRON CHEMICAL COMPANY

AND

CEDAR CHEMICAL CORPORATION

Revision September 11, 1991

TOLL PROCESSING AGREEMENT FOR
CTBL

This Agreement has been entered into effective as of August 30, 1991, by and between

Chevron Chemical Company
6001 Bollinger Canyon Road
San Ramon, CA 94583
("Chevron") and

Cedar Chemical Corporation
5100 Poplar Ave., 24th Floor
Memphis, Tennessee 38137
("Cedar")

The Premises of this Agreement are that:

A. Cedar has the expertise and, when modified hereunder, the facilities for toll processing Product, CTBL conforming to the specifications set forth in Exhibit A hereto, and processed in accordance with the manufacturing, operating and engineering specifications and procedures set forth in Exhibit B hereto.

B. Cedar desires to produce and deliver to Chevron and Chevron desires to receive from Cedar, Product, in accordance with the terms and conditions of this Agreement.

Accordingly, with the intent to be bound hereby, the parties agree to the following terms and conditions:

1. Definitions

When used in this Agreement the terms listed in this Section 1 shall have the following meanings:

1.1 "Product" means CTBL, as set forth in Exhibit A conforming to the Product Specifications set forth in Exhibit A. Chevron reserves the right to amend the specifications in Exhibit A upon reasonable notice to Cedar and upon mutual agreement thereof.

1.2 "Product Specifications" means Chevron's specifications for CTBL as set forth in Exhibit A.

1.3 "Manufacturing Specifications" means the manufacturing, operating and engineering specifications and procedures set forth in Exhibit B.

1.4 "Process" means all those actions required to carry out the purposes of this Agreement in accordance with Chevron's said Manufacturing Specifications, including by way of example and not limitation: the receiving, unloading and storing of all Raw Materials; conversion of Raw Materials into Product; packaging the Product and preparing Product for shipment; and performing other operations ancillary to such activities as mutually agreed.

1.5 "Term" means the period of time described in Section 10 herein.

1.6 "Plant" means Cedar's manufacturing facility located in West Helena, Arkansas in which the Product will be processed.

1.7 "Raw Materials" means those raw materials or other supplies listed on Exhibit C hereto for use in the Processing.

1.8 "Contingency" means an occurrence affecting the performance of either Party which results in the failure of Cedar to Process and ship the Product to Chevron: (1) if such failure is caused or occasioned by Act of God, the public enemy, fire, explosion, equipment failure, flood, earthquake, tornado, hurricane, war, riot, sabotage, or other similar catastrophe or threat thereof, accident, embargo, strike, lockout or other industrial disturbance, shortage, delay or failure of supply of materials from the then contemplated source of supply, power, utilities, labor, fuel or equipment, interruption of or delay in transportation or any other event or circumstance whether of like or different character to the foregoing beyond the reasonable control of the party so failing; or (2) if such failure is caused or occasioned by compliance with any order, regulation or request of any Federal, state or municipal government or any officer, department, agency or committee thereof, including requisition, allocation or establishment of priorities, or any request authorized by such governmental authority or received from any manufacturer of material used by the Government; or (3) if such failure is caused or occasioned by the cancellation, suspension, or material adverse modifications to any of the licenses to operate, or the inability to operate, the Plant in compliance with applicable governmental regulations.

2. Raw Materials

2.1 Except as provided in paragraph 2.2, Chevron shall deliver to Cedar an adequate supply of Raw Materials to be used by Cedar as listed and described in Exhibit C hereto. For each Processing campaign, Chevron and Cedar shall agree to an Operating Schedule for the performance of the respective obligations under this Agreement. The parties agree that subject to issuance of all necessary permits, the initial processing campaign shall begin on or about November 1, 1991, in accordance with Section 3.4.

In the event Chevron fails to deliver the Raw Materials to Cedar in accordance with such schedule, other than as a result of a Contingency, and the delay was not contributed to by Cedar, Chevron shall pay to Cedar a delay fee in the amount of (i) $6,000 per day for each day of delay.

2.2 The parties may agree from time to time that Cedar shall procure certain of the Raw Materials rather than Chevron. A written list of Raw Materials which Cedar will procure will be developed each year, and the cost for each will be mutually agreed upon. The Raw Materials to be provided by Cedar for the first Processing campaign are set forth in the attached Exhibit C. Chevron will reimburse Cedar for the actual cost of Raw Materials up to the agreed cost, but no more, unless the actual cost exceeds the agreed cost by ten percent (10%). Cedar agrees to inventory Raw Materials to the limits of the installed capacity. If requested by Chevron, Cedar will, at Chevron's expense, install adequate storage for inventory of Product.

2.3 Cedar shall examine and sample the Raw Materials upon the receipt thereof from Chevron or Chevron's supplier and determine from the certificate of analysis if the Raw Materials meet the specifications as described in Exhibit C hereto. In addition, Cedar shall also analyze the raw material CTBA, in accordance with procedures outlined in Exhibit D. Cedar shall report any apparent shortage, contamination or other defect in the Raw Materials to Chevron immediately upon becoming aware thereof but in no event later than fifteen (15) days from the receipt thereof. Cedar shall retain samples of all Raw Materials for one year after receipt.

2.4 Chevron and Cedar anticipate that the Raw Materials will be Processed into Product in accordance with the usage ratios set forth in Exhibit B hereto.

Recognizing that such usage ratios have not been developed in Cedar's West Helena location, the parties agree that Cedar shall attempt to Process the Product in conformity with such usage ratios as described in Exhibit B. (After the first 100,000 lbs. of the first processing campaign standards will then be set based on actual experience and good faith consultation between Cedar and Chevron for subsequent processing). Thereafter, should Chevron direct any material change in the method of Processing the Product, requiring the defining and establishing of new usage ratios, Cedar shall use its best efforts to Process 100,000 lbs. of Product using the new procedures with no liability for over standard usage of Raw Materials.

2.5 Raw Materials remaining in possession of Cedar on the effective date of termination of this Agreement shall be returned to Chevron, or otherwise removed from the Plant in a manner which shall be mutually agreed to by Cedar and Chevron, within ninety (90) days after termination.

2.6 Blanket orders for Raw Materials to be used in the Processing of Product will be placed by Chevron's Purchasing Department in San Ramon, California. Cedar will be provided with Chevron's blanket order release forms and receiving sheets to apply against the blanket orders for release of Raw Materials directly to the Plant. Invoices for Raw Material shipments made to Cedar as well as the original and accounting copy portion of the blanket order release forms should be directed for payment to:

Chevron Chemical Company
Accts. Payable Dept.
940 Hensley Street
Richmond, CA 94804

Inquiries by Cedar regarding purchases of Raw Materials shall be directed to:

Valent U.S.A. Corporation
P. O. Box 8025
Walnut Creek, CA 94596-8025
Attention: Manager, Marketing Services
Phone: (415) 256-2772
Fax: (415) 256-2776

Chevron shall request that Cedar is to be provided with certification of analysis by the suppliers for each shipment of Raw Material. Shipments not accompanied by such certification are to be rejected and notification of such rejection shall forthwith be made to Valent as noted above.

2.7 Chevron and Cedar anticipate that the Raw Materials will be Processed into Product in accordance with the usage ratios set forth in Exhibit B hereto. After usage ratios have been established with Cedar (Section 2.4), Cedar shall be entitled to a bonus of fifty percent (50%) of the Raw Material savings which is in excess of three percent (3%) below the usage ratios. Cedar shall reimburse Chevron for all Raw Material costs greater than three percent (3%) above the usage ratios. Settlement of the Raw Materials usage and of accounts and payment of the bonus or reimbursement shall be at the end of the performance of each Processing campaign hereunder and after all usages and production have been verified. Chevron shall permit Cedar to audit its raw material costs upon reasonable notice, for purposes of this paragraph.

3. Processing Services

3.1 Cedar shall Process the Raw Materials for Chevron subject to the terms and conditions stated herein, in the quantities as established pursuant to this Agreement and in accordance with the Manufacturing Specifications or such procedures as may be provided by Chevron during the course of the term hereof. Cedar shall retain representative samples of each batch of Product for a period of one year.

3.2 Cedar shall supply all equipment, utilities and manpower necessary for Processing Product and shipping Product to Chevron.

3.3 In the Processing conducted hereunder, Cedar shall establish and maintain appropriate procedures to prevent loss, injury or damage to the environment and to people who may be exposed to the Raw Materials, reaction mixtures during Processing, Product, and all by-products and waste products. Upon request, Cedar will furnish to Chevron copies of all procedures that Cedar shall have established with respect to safety, health and environmental protection in so far as it affects the Product and Cedar's performance hereunder. Cedar will in good faith consider and implement any reasonable suggestions made by Chevron relating to such procedures. Cedar shall commence the first processing campaign, hereunder on or about November 1, 1991.

3.4 During the first Processing campaign of this Agreement, Cedar shall Process for Chevron 275,000 pounds of CTBL (100% basis). Cedar shall not warrant product to meet the specifications identified in Exhibit A until it has produced the first 100,000 pounds of Product. Thereafter, Cedar shall warrant all Product to meet said specifications and shall be bound by such Raw Material usage ratios as the Parties shall adapt in accordance with Section 2.4.

Cedar shall commence the first processing campaign hereunder on or about November 1, 1991 and shall Process the Product at the rate mutually agreed to until the quantity ordered by Chevron hereunder has been Processed. During the first Processing campaign, Cedar shall make its best efforts to conclude all CTBL Active Isomer production by December 5, 1991. Such Processing obligation is subject to Cedar being timely furnished with Raw Materials so as to meet scheduled production.

3.5 Not later than October 1, 1991, Chevron may: (i) request an increase in its actual requirements of Product by up to 50,000 lbs. of CTBL, subject to Cedar's consent thereto, which consent shall not be unreasonably withheld conditioned or delayed, if Cedar has any unused capacity at the Plant, and/or; (ii) reduce its actual requirements under this Agreement by up to 50,000 lbs. of CTBL without penalty. Any further reduction by Chevron below 240,000 lbs. of CTBL during the first Processing campaign shall be subject to the delay fee for each pound of the shortfall specified in subsection 4.4 hereof. Such delay fee shall be Chevron's sole liability to Cedar for decreasing Chevron's order for Product.

3.6 Processing campaigns after the first Processing campaign shall include Chevron's entire annual requirements of CTBL and shall be scheduled as mutually agreed upon. Future campaigns may also include the Processing of Manufacturing Use Lactofen Concentrate from CTBL Raw Material if mutually agreed to by Cedar and Chevron.

4. Fees

4.1 Chevron shall pay to Cedar a fee for Processing the Product computed from the following schedule hereunder. All prices are F.O.B. Cedar's Plant, West Helena, Arkansas, delivered into bulk shipping vessels.

4.1.1 All Product packed into drums shall carry a surcharge of $0.05 per pound of active isomer.

4.1.2 The processing fee during the initial campaign shall be $14,000/day for each day or part day of production hereunder plus $70,000 for plant preparation and clean-up, as described in Exhibit E, however the per diem processing fee shall be adjusted pro rata to the extent that the rated capacity of that portion of the Plant used to produce Product shall exceed or be less than 9,483 pounds per day. At such time as the parties agree on the final piping and instrumentation design (P&ID) identified in Exhibit F, the Parties shall also agree on the final rated capacity of such facilities for purposes of calculating the fee hereunder.

4.1.3 Chevron shall pay to Cedar $70,000 for plant preparation and clean-up as per Exhibit E each year at the conclusion of the processing campaign.

4.1.4 The processing fee shall be adjusted by mutual agreement effective on August 1st of each contract year.

4.2 All wastes generated during the performance of this Agreement including containers containing Raw Materials shall be disposed of by Cedar in accordance with all applicable laws and in a manner approved by Chevron. Chevron shall approve the selection of the industrial landfill used for disposal of Process waste, bills of lading, waste manifests and/or any other related documentation or procedures. Any hazardous wastes shall be disposed of by Cedar in a Chevron site. A copy of all bills of lading, waste manifests and other documentation prepared for the disposal of any wastes generated in the performance of this Agreement shall be forwarded upon receipt to:

Chevron Chemical Company
940 Hensley Street
Richmond, CA 94804
Attention: Manager Environmental, Health and Safety

4.3 Chevron shall pay Cedar for all costs of disposal incurred by Cedar, pursuant to Section 4.2 of this Agreement, hereunder, upon Chevron's receipt and approval of a detailed invoice therefor from Cedar. Each month during the term of this Agreement, Chevron shall reimburse Cedar the estimated cost of the waste disposal charges incurred by Cedar for that month based upon the pounds of Product actually Processed during the month. At the end of each production run, this waste disposal account shall be reconciled to determine the actual costs incurred by Cedar. Cedar shall forthwith refund any over-payment of estimated cost reimbursement to Chevron.

4.4 Chevron has provided Cedar with $50,000 to be used toward the engineering and instrumentation at their West Helena plant location for preparation of the production of CTBL in 1991. Cedar agrees to implement the modifications to its Plant in accordance with the preliminary P&ID attached as Exhibit F at a cost to Chevron not to exceed $200,000 of which the aforementioned $50,000 is a part. The Parties shall document, approve and attach hereto the final version of Exhibit F before Cedar starts the first processing campaign. Chevron shall reimburse Cedar its actual costs of modifying the Plant as aforementioned, but not more than $200,000 plus the actual cost of any scope changes approved by Chevron in the preliminary P&ID, upon notice by Cedar of completion of the modifications. Cedar shall provide documentation, including copies of invoices, to account for the expenditure of these monies.

4.5 The processing fee shall be invoiced to Chevron at the beginning of each month for the prior month. Any delay fees shall be invoiced to Chevron upon the completion of each Processing campaign. Payment shall be due thirty (30) days from receipt of the invoice.

5. Deliveries

5.1 The final Product shall be delivered to Chevron as 60% solution in Methylene Chloride per the specifications for CTBL in Exhibit A. Each shipment of CTBL shall be accompanied by a certificate of analysis stating, at minimum, the CTBL (AI) in Methylene Chloride and the CTBL, CTBL i, CTBA, L-CTBL and Ac-CTBL assay on a solvent free basis determined in accordance with the procedures set forth in Exhibit G.

5.2 At Chevron's direction, Cedar shall schedule shipment of the Product by carriers chosen from a list approved in writing by Chevron, to such locations as Chevron may, at Chevron's sole discretion, designate, FOB the Plant.

5.3 Cedar shall forward to Chevron monthly, inventory records, receipts and shipment and use records of all inventory related to the Processing. These records should include all Raw Materials and Product. These records will be forwarded to:

Chevron Chemical Company
940 Hensley Street
Richmond, CA 94804
Attn: Mr. J. A. Cook

with a copy to:

Valent U.S.A. Corporation
1333 North California Boulevard
P.O. Box 8025
Walnut Creek, CA 94596-8025
Attn: Anita K. Dale

6. Title and Risk of Loss

6.1 Title to and all other incidents of ownership of all Raw Materials and Product shall at all times be in Chevron from the time of receipt by Cedar of the Raw Materials from Chevron or the supplier.

6.2 While any and all Raw Materials and Products are in the possession or custody of Cedar, Cedar agrees to bear the risk of any loss or damage. The Raw Materials shall be deemed to be in the possession or custody of Cedar upon receipt (with respect to the Raw Materials) or Processing (with respect to Product), as the case may be, by Cedar, and shall remain in Cedar's possession or custody until delivered to Chevron or to Chevron's carrier.

6.3 Risk of loss of Product delivered and surplus Raw Materials returned hereunder shall pass to Chevron upon delivery of the Product to the carrier, FOB the Plant. Cedar shall not impose or permit to be imposed upon any of the Product or surplus Raw Materials any liens or encumbrances whatsoever.

6.4 Cedar shall be responsible for all unreasonable loss, contamination, or damage of whatsoever nature to the Product and Raw Materials while in the custody or possession of Cedar. Any loss of activity due to storage of ninety (90) days or more beyond the date of the certificate of analysis shall be the responsibility of Chevron.

7. Health and Safety

7.1 The safe operation of the Plant is a matter of great importance to each party hereto. Chevron may but shall have no obligation to inspect the Plant for potential health or safety problems at any time during the term of this Agreement.

If Chevron should observe any of Cedar's practices or operations outside the scope and limitation of any applicable laws, regulations or statutes which appear to pose a danger or risk to human health or safety or to the environment and so advises Cedar, Cedar shall promptly take such steps as are reasonable and necessary to eliminate such danger or risk.

7.2 The Raw Materials, reaction mixtures during Processing and Product may be or become hazardous. Cedar acknowledges that it understands or will ascertain and understand the potential toxic and hazardous properties concerning the Raw Materials, reaction mixtures during processing, Product, and all by-products and waste products therefrom and will take reasonable steps to so inform and familiarize all of its employees, agents, and contractors who may handle CTBL all uses and applications thereof, containers in which the CTBL or other goods may be shipped or stored and equipment with which they are used and/or handled. Cedar shall also familiarize itself with any Federal, state or local laws and regulations relating to the foregoing sentence. Cedar undertakes to label the Raw Materials , the Product and other goods processed therefrom and all applicable containers and equipment as appropriate to give due warning and protection to its employees and others from such hazards, to inform, protect and train its agents and employees in the safe and proper use, handling and labelling of these materials.

8. Environmental

Cedar will employ such controls and inspections as are necessary to adequately protect the environment surrounding the Plant from exposure to Chevron products. Cedar will notify Chevron immediately of any spills or leaks which allow Chevron products into the atmosphere, sewers, dikes, or beyond the boundaries of the Plant.

Cedar will notify Chevron immediately of any fires where Chevron products are stored and/or Processed. Cedar will store Chevron materials only in warehouses which are approved by Chevron.

9. Specifications and Contamination

Cedar understands and agrees that it is of the utmost importance that the unused Raw Materials and Products are to be delivered to Chevron free of any contaminants or foreign matter. When the unused Raw Materials and Product are delivered to Chevron, it is to be packaged in compliance with all applicable Federal and state laws and regulations and Cedar shall institute procedures to ensure compliance therewith.

10. Term of Agreement

10.1 This Agreement shall become effective and binding upon the parties upon the execution hereof by both parties.

10.2 Unless earlier terminated pursuant to the provisions of subsection 10.3, this Agreement will continue for a term ending July 31, 1994.

10.3 Notwithstanding any other provision of this Agreement, this Agreement may be terminated at any time upon the happening and continuance of any of the following events or conditions:

10.3.1 By the non-defaulting party if the other party is in material breach of any of its obligations hereunder and fails to commence to remedy such breach within five (5) days of receipt of notice thereof from the non-defaulting party.

10.3.2 Upon the mutual agreement of the parties to terminate this Agreement.

10.3.3 By Chevron upon notice if Cedar transfers operating control of the plant by means of sale, lease, assignment or other transfer of substantially all the plant, property and equipment within the Plant to a company that is not a majority owned subsidiary of Cedar or upon the termination of such subsidiary being a majority owned subsidiary of Cedar.

10.3.4 By Chevron in the event that it determines, in its reasonable, good faith, discretion, that pending or threatened claims or litigation involving Chevron's patent position relating to the Product makes further manufacturing of the Product no longer a prudent business activity.

11. Technical Information

11.1 To facilitate Cedar's performance hereunder, it is necessary for Chevron to disclose to Cedar certain of Chevron's proprietary, confidential data and information relating to the Process ("Chevron Information"), including that information previously disclosed to Cedar. Cedar agrees to receive Chevron Information in confidence and shall maintain in confidence all Chevron Information relating to the Process heretofore or hereafter made available to Cedar directly or indirectly by Chevron. Cedar will not use any portion of the Chevron Information for any purpose other than the Processing described herein, and will not disclose all or any portion of the Chevron Information to others without Chevron's prior written consent. The provisions of this Section 11.1 shall not apply to any data or technical information (a) which was developed by Cedar and in Cedar's possession, as evidenced by written records of Cedar, prior to Cedar's first receipt of the same, directly or indirectly, from Chevron; (b) which is now, or hereafter becomes through no act or failure to act on Cedar's part, published information generally known on a nonconfidential basis to the chemical manufacturing industry; (c) which was heretofore or is hereafter furnished to Cedar by others as a matter of right without

restriction on use or disclosure; (d) which Cedar proves was in its possession prior to its first receipt thereof, directly or indirectly from Chevron.

11.2 It is understood that the disclosure to Cedar of Chevron Information shall not be construed as granting a license under any patent rights Chevron or its affiliates may own or control.

11.3 Upon the termination or expiration of this Agreement, Cedar shall return to Chevron all documentation provided by Chevron or generated by Cedar relative to Cedar's performance of this Agreement, except for the current production records which shall be delivered to Chevron within twenty-four (24) months from the date of termination or expiration.

11.4 Cedar will cooperate in educating Chevron representatives concerning the technology and know how of manufacturing the Product. This will include site visits to Cedar's manufacturing facilities. Chevron shall have the same obligations with respect to Cedar's proprietary , confidential data and information ("Cedar Information") that Cedar has with respect to Chevron Information set forth in Section 11.1. Information relating to Product production shall be deemed to be Chevron Information to the extent that it is contained in Cedar reports written to Chevron detailing the work done.

12. Contingencies

12.1 Each party hereto shall be relieved from liability hereunder for failure to deliver or accept delivery of any Raw Materials or any Product for the time and to the extent such failure to perform is caused or occasioned by a Contingency. A party incurring a Contingency shall use all reasonable efforts to remedy the Contingency with dispatch.

In the event that either party becomes unable by a Contingency to carry out its obligations of delivery or acceptance under this Agreement, in whole or in part, such party shall promptly give the other party notice and full particulars, including the expected duration of such Contingency.

12.2 Strikes or Lockouts. It is understood and agreed that the settlement of strikes or lockouts involving either of the parties hereto shall be entirely within the discretion of the party having the difficulty, and that the above requirements that any Contingency shall be remedied with dispatch shall not require the settlement of strikes or lockouts by acceding to the demands of the employees involved, when such course is inadvisable in the discretion of the party having the difficulty.

13. Warranties and Covenants

13.1 Chevron warrants and covenants that:

13.1.1 Chevron shall have unencumbered title to such Raw Materials as of the time the Chevron Raw Materials are delivered by Chevron to Cedar, and such Raw Materials shall meet the specifications identified in Exhibit C hereto.

13.1.2 Chevron has disclosed to Cedar all hazards known to it associated with the manufacturing, handling and use of Raw Materials and Product and all reaction mixtures, by-products and waste products produced in connection with the production of Product hereunder.

13.2 Cedar warrants and represents that:

13.2.1 The operation of the Plant, including any applicable licensing for such operations, and the processing, packaging and shipping of the Products shall be in compliance with

all applicable governmental laws, ordinances, rules, regulations, executive orders, government guidelines and other public statements of policy;

13.2.2 Subject to the provisions of Section 3.4, the Product when delivered to Chevron will conform to the Product Specifications as set forth in Exhibit A.

13.2.3 Cedar has read and understands the Exhibits attached hereto and fully understands the nature of all Raw Materials, products and other substances involved in the Processing of the Product.

13.2.4 Cedar will take all steps necessary to protect its employees, the public and the environment from any risk of loss, damage, injury, death or other liability for claims therefore associated with any and all of the foregoing.

14. Indemnity

14.1 Cedar shall indemnify and hold harmless Chevron, Chevron's affiliates and the agents and employees of Chevron and Chevron's affiliates ("indemnitees"), from and against any and all loss, damage, injury, expenses (including reasonable attorneys' fees) and liability for injury to or death of a person, including an employee of Cedar or an indemnitee, or for loss of or damage to property, including property of Cedar, resulting directly or indirectly from Cedar's performance or lack of performance under this Agreement, except to the extent such loss, damage, injury or liability is the result of Chevron's negligence, breach of its representations or warranties hereunder, or willful misconduct.

14.2 Chevron shall indemnify and hold harmless Cedar, Cedar's affiliates and the agents and employees of Cedar and Cedar's affiliates ("indemnitees"), from and against any and all loss,

damage, injury, expenses (including reasonable attorneys' fees) and liability for injury to or death of a person, including an employee of Chevron or an indemnitee, or for loss of or damage to property, including property of Chevron, resulting directly or indirectly from Chevron's performance or lack of performance under this Agreement, arising out of the handling, transportation, storage or use of Raw Materials or Product after delivery to Chevron hereunder except to the extent such loss, damage, injury or liability is the result of Cedar's negligence, breach of its representations or warranties hereunder, or willful misconduct.

14.3 Chevron shall indemnify, defend and hold harmless, Cedar, Cedar's affiliates and the agents and employees of Cedar and Cedar's affiliates ("indemnities"), from and against any and all loss and expenses including reasonable attorney's fees arising out of any patent infringement claim asserted against Cedar based on Cedar's performance hereunder.

15. Insurance

15.1 CONTRACTOR shall, at its own expense, carry and maintain the following insurance with companies and on terms satisfactory to CHEVRON:

15.1.1 Worker's Compensation and Employer's Liability Insurance as prescribed by applicable law;

15.1.2 Comprehensive General Liability (Bodily Injury and Property Damage) Insurance;

15.1.3 Automobile Bodily Injury and Property Damage Liability Insurance, extending to owned, non-owned and hired automobiles, trucks, buses, vans and other motorized vehicles used in the performance of this Agreement, in the amounts of $250,000

per person and $500,000 per occurrence for bodily injury and $100,000 per occurrence for property damage.

15.2 Unless specified otherwise above, the limits of liability of such insurance shall be not less than five hundred thousand dollars ($500,000) per person and not less than one million dollars ($1,000,000) per occurrence.

15.3 This insurance shall be expressly endorsed to name CHEVRON as an additional insured and shall include a requirement that the insurer provide CHEVRON with not less than thirty (30) days advance written notice prior to the effective date of any cancellation or material change.

15.4 The requirements of this Section 15 are in addition to CONTRACTOR obligations set forth in Section 15.1, and does not limit them, satisfy them or derogate from them.

15.5 Prior to the start of any processing or packaging under this Agreement, and in any case not more than thirty (30) days after the execution of this Agreement, CONTRACTOR shall deliver to CHEVRON evidence of such insurance and endorsement.

16. Taxes

16.1 Chevron shall assume responsibility and pay for all tangible personal property taxes assessed by any governmental authority with respect to the Raw Materials and Product while in Cedar's custody and possession.

16.2 The Processing Fees for the Product include all Federal, state and local taxes, duties and other governmental charges and fees that may hereafter be imposed on any aspect of the Processing

of the Product, or the performance of other work hereunder, all of which taxes, duties, charges and fees shall be paid by Cedar.

17. Right of Review

17.1 Cedar shall maintain true and current records in connection with its performance hereunder and all transactions related thereto and shall retain all such records for at least twenty-four (24) months after the termination date of this Agreement.

17.2 Chevron shall have the right at its expense to have an authorized representative of Chevron interview the salaried or supervisory personnel of Cedar and to review during regular business hours the appropriate books and records of Cedar for the purpose of verifying the compliance by Cedar with the provisions of this Agreement.

17.3 Cedar shall assist Chevron in making the above reviews.

18. Conflicts of Interest

No director, employee or agent of Cedar shall give or receive any commission, fee, rebate, gift or entertainment of significant cost or value in connection with this Agreement, or enter into any business arrangement with any director, employee or agent of Chevron or any affiliate other than as a representative of Chevron, without prior written notification thereof to Chevron. Cedar shall promptly notify Chevron of any violation of this Section and any consideration so received shall be paid over or credited to Chevron. Additionally, if any violation of this Section occurring prior to the date of this Agreement resulted directly or indirectly in Chevron's consent to enter into this Agreement with Cedar, Chevron may, at the it's sole option, terminate this Agreement at any time and, notwithstanding any other provision of this Agreement

pay no compensation or reimbursement to Cedar whatsoever for any work done after the date of termination.

19. Notices

19.1 Notices under this Agreement shall be given in writing and delivered:

If to Chevron to:

Chevron Chemical Company
940 Hensley Street
Richmond, CA 94804
Attn: Mr. J. A. Cook
Fax: 415 231-8455

with a copy to:

Chevron Chemical Company
Attn: Vice President and
General Counsel
6001 Bollinger Canyon Road
San Ramon, CA 94583
Fax: 415-842-5775

and a copy to:

Valent U.S.A. Corporation
Attn: Anita K. Dale
1333 North California Boulevard
P.O. Box 8025
Walnut Creek, CA 94596-8025
Fax: 415 256-2776

If to Cedar to: Cedar Chemical Corporation
Attn: Geoffrey L. Pratt
5100 Poplar Ave., 24th Floor
Memphis, TN 38137
Telex No.: 53927
Fax: 901 684-5398

or to such other address as may be designated by such party.

19.2 Notices shall be deemed to have been given:

(a) On the same business day if the notice has been delivered by hand or sent by telecopier or by telex with the correct answer back; or

(b) On the next succeeding business day following receipt of a notice sent by registered or certified U.S. mail, return receipt requested, as evidenced by the return receipt card properly endorsed by the receiving party.

20. Assignment

20.1 Except as provided below, none of the rights or obligations of either party hereunder may be assigned without the other party's prior written consent, which consent shall not be unreasonably withheld; provided, however, either party may assign this Agreement to any company controlling, controlled by or under common control with the assignor. Any other assignment without such written consent shall be void.

20.2 Chevron may at any time during the term of this Agreement assign all of its contract rights, and delegate all of its contract duties, to Valent U.S.A. Corporation ("Valent") (and its parent company), in which event, Cedar will look solely to

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Valent and its parent company for the satisfactory performance of this Agreement.

21. Governing Law

The parties hereto agree that all of the provisions of this Agreement and any questions concerning its interpretation and enforcement shall be governed by the internal laws of the State of Arkansas, without applying any rules regarding choice of laws, and the execution and delivery of this Agreement shall be deemed to be the transaction of business within the State of Arkansas for purposes of conferring jurisdiction upon courts located within the State.

22. Waivers

No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provisions hereof (whether or not similar), nor shall such waiver constitute a continuing waiver unless otherwise expressly provided. Any obligations to be performed by either party before, upon or subsequent to the termination of this Agreement shall survive termination of this Agreement if not already made or performed at date of termination.

23. No Third Party Beneficiaries

Nothing in this agreement shall entitle any person other than Chevron or Cedar or their respective successors and assigns permitted hereby to any claim, cause of action, remedy or right of any kind.

24. Independent Contractor

Nothing in this Agreement shall be construed to constitute Chevron or Cedar as a partner, joint venturer, agent or other representative of the other. Each is an independent company retaining complete control over and complete responsibility for its own operations and employees. Nothing in this Agreement shall be construed to grant either party any right or authority to assume or create any obligation on behalf or in the name of the other; to accept summons or legal process for the other; or to bind the other in any manner whatsoever.

25. Employment Practices

To the extent applicable to this Agreement, Cedar shall comply with the following clauses contained in the Code of Federal Regulations and incorporated herein by reference: 48 C.F.R. § 52.203-6 (Subcontractor Sales to Government); 48 C.F.R. § 52.219-8, 52.219-9 (Utilization of Small and Small Disadvantaged Business Concerns); 48 C.F.R. § 52.219-13 (Utilization of Women-Owned Business Concerns); 48 C.F.R. § 52.222-26 (Equal Opportunity); 48 C.F.R. § 52.222-35 (Disabled and Vietnam Era Veterans); 48 C.F.R. § 52.222-36 (Handicapped Workers); 48 C.F.R. § 52.223-2 (Clean Air and Water); and 48 C.F.R. § 52.223-3 (Hazardous Material Identification and Material Safety Data). Unless previously provided, if the value of this Agreement exceeds $10,000, Cedar shall provide a Certificate of Nonsegregated Facilities to Chevron. Cedar agrees and covenants that none of its employees, or employees of its subcontractors, who provide services to Chevron pursuant to this Agreement are unauthorized aliens as defined in the Immigration Reform and Control Act of 1986.

26. Entirety of Agreement

26.1 This Agreement constitutes the entire agreement between the parties hereto pertaining to the subject matter hereof and supersedes all prior agreements, understandings, negotiations and discussions of the parties, whether oral or written, and there are no warranties, representations or other agreements between the parties in connection with the subject matter hereof except as specifically set forth herein. No supplement, modification, waiver or termination of this Agreement shall be implied from any conduct of the parties or trade custom or usage, but to be binding must be executed in writing by the party to be bound thereby.

26.2 The parties recognize that from time to time instructions, invoices and similar documentation will be transmitted by each party to the other to facilitate the implementation of this Agreement. Any terms and conditions contained in any of those documents which are inconsistent with the terms of this Agreement shall be null, void and not enforceable.

27. **Arbitration**

In the event that the parties are unable within a period of three (3) months to resolve any dispute between them concerning the scope or interpretation of this Agreement, either party may submit the matter to arbitration for resolution. Arbitration shall be held in Denver, Colorado before three arbitrators. The rules of commercial arbitration of the American Arbitration Association in effect on the date the matter is submitted to arbitration shall apply. The decision of the arbitrators shall be in writing and shall contain the findings of fact and conclusions of law on which their decision is based. Unless clearly erroneous, such decision shall be final and binding on the parties and may be enforced in any court of competent jurisdiction.

The parties hereto have executed this Agreement to be effective as of the date first hereinabove written.

CEDAR CHEMICAL CORPORATION.	CHEVRON CHEMICAL COMPANY
By: _____	By: Norman R. Angell
Title: _____	Title: Ag. Chem. Div. Manager
Date: _____	Date: October 4, 1991

CERTIFICATE OF NONSEGREGATED FACILITIES

Cedar certifies that he does not and will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not and will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. Cedar understands that the phrase "segregated facilities" includes facilities which are in fact segregated on a basis of race, color, creed, or national origin, because of habit, local custom, or otherwise. Cedar understands and agrees that maintaining or providing segregated facilities for his employees or permitting his employees to perform their services at any locations, under his control, where segregated facilities are maintained is a violation of the Equal Opportunity Clauses required by Executive Order No. 11246 of September 24, 1965, and the regulations of the Secretary of Labor set out in 33 C.F.R. 7804 (May 28, 1968). Cedar further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity Clauses; that it will retain such certifications in its files, and that it will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENTS FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

A Certificate of Nonsegregated Facilities as required by the May 9, 1967, order on Elimination of Segregated Facilities, by the Secretary of Labor (32 F.R. 7439, May 19, 1967), and as required by the regulations of the Secretary of Labor set out in 33 F.R. 7804 (May 28, 1968) and as they may be amended, must be submitted prior to the award of a subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity Clauses. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semi-annually or annually).

CEDAR CHEMICAL CORPORATION

By: _____

Its:

Return to:
Chevron Chemical Company
6001 Bollinger Canyon Road
San Ramon, California 94583
Attn: Vice President/General Counsel

TOLL PROCESSING AGREEMENT

CTBL

EXHIBIT A

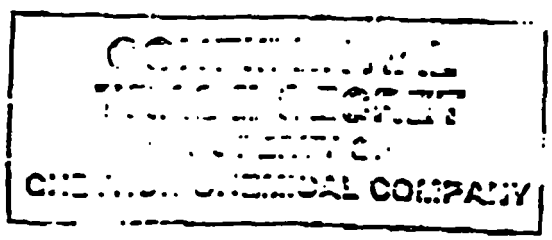
PRODUCT SPECIFICATIONS

CTBL SPECIFICATION
(Solvent Free)

Proposed for the manufacture of CTBL by PPG at Barberton, Ohio.

Compound	Limit	Test Method
CTBL	86.5% Min.	B94
i CTBL	8.2% Max.	B94
CTBA	2.0% Max.	B94
L CTBL's	2.5% Max.	B94
Ac-CTBL	0.3% Max.	B94

Other impurities from CTBA (DICTBL, DICTBA, Mc-CTBL, etc.) allowable at levels indicated from CTBA quality.



MEMORANDUM

CONFIDENTIAL

To: A. K. DALE Date: 9/3/91

From: James A. Cook, Jr.

Subject: EXHIBITS A & B OF THE CEDAR CONTRACT

Attached are the items needed for Exhibits A and B of the Cedar contract except for the potassium carbonate specification which is below.

POTASSIUM CARBONATE

DENSE ANHYDROUS GRANULAR POTASSIUM CARBONATE (K_2CO_3)
MUST BE FREE FLOWING NO FINE POWDER

TYPICAL ANALYSIS: 99.7% K_2CO_3
0.0% $KHCO_3$
0.000065% Fe

50 LB. BAGS - PALLETIZED

AVAILABLE FROM: ARMAND PRODUCTS CO.
469 NO. HARRISON ST.
PRINCETON, NJ 08540

The specifications for CTBA and CTBL are on the solvent free basis. In the process, for purposes of shipping, these are not isolated solvent free but as CTBA in DMSO and CTBL in methylene chloride. There are no rigid specifications on the CTBA/CTBL in solvent but in both cases they are shipped as ~60% ai. Since both CTBA and CTBL contain ~10% of an inactive isomer which reacts exactly as CTBA or CTBL in the process, the reactive content of the solutions is ~70% 'CTBA' or 'CTBL'. Each manufacturer has analytical methods for determining the reactive content of the material sent to them and make process adjustments accordingly. The specifications on the solvent free basis are for purposes of protecting the purity of the final product lactofen. Thus:

EXHIBIT A

PRODUCT SPECIFICATIONS

CTBL (Solvent free basis)

EXHIBIT B

RAW MATERIAL SPECIFICATIONS

CTBA (Solvent free basis)
DIMETHYLSULFOXIDE (DMSO)
ETHYL-2-CHLOROPROPIONATE (ECP)
HYDROCHLORIC ACID (31%)
METHYLENE CHLORIDE
POTASSIUM CARBONATE (see above)
SODIUM HYDROXIDE (50%)
SODIUM HYPOCHLORITE (12.5%)

I believe that this covers everything. Please call if you have questions.

TOLL PROCESSING AGREEMENT

CTBL

EXHIBIT B

MANUFACTURING SPECIFICATIONS

(Including Target Usage Ratio)

MEMORANDUM

CONFIDENTIAL

To: A. K. DALE **Date: 9/4/91**

From: James A. Cook, Jr.

Subject: RAW MATERIAL USAGE RATIO EXHIBIT FOR CEDAR CONTRACT

RAW MATERIAL	USAGE #/#CTBL ai
CTBA ai (Solvent free basis)	0.792
DIMETHYLSULFOXIDE (DMSO)	0.528
ETHYL-2-CHLOROPROPIONATE (ECP)	0.430
HYDROCHLORIC ACID (31%)	0.129
METHYLENE CHLORIDE	0.587
POTASSIUM CARBONATE	0.213
SODIUM HYDROXIDE (50%)	0.398
SODIUM HYPOCHLORITE (12.5%)	0.160

TOLL PROCESSING AGREEMENT

CTBL

EXHIBIT C

RAW MATERIALS SPECIFICATIONS

CTBA SPECIFICATION
(Solvent Free)

Compound	Limit	Test Method
(b) (4)	[redacted]	

PPG Industries, Inc. P.O. Box 31 Barberton, Ohio 44203 (216) 848-4161

Barberton Technical Center
Chemicals

PRODUCT SPECIFICATIONS

RS-046

DATE: 5-29-87

SUPERCEDES DATE: 10-9-85

NAME: DIMETHYLSULFOXIDE (DMSO)

(b) (4)

[redacted]

PPG Industries, Inc. P.O. Box 31 Barberton, Ohio 44203 (216) 848-4161

Barberton Technical Center
Chemicals

REASON TO ISSUE

(b) (4) [redacted]

APPROVALS

ISSUED BY: R. B. Pfost — R. B. PFOST   APPROVED BY D. K. Krass — D. K. KRASS

PPG Industries, Inc. P.O. Box 31 Barberton, Ohio 44203 (216) 848-4161

PRODUCT SPECIFICATIONS

Barberton Technical Center
Chemicals

RS-049

DATE: 10-9-85

SUPERCEDES DATE: 5-23-85

NAME: ETHYL 2-CHLOROPROPIONATE (ECP)

(b) (4)

[redacted]

PPG Industries, Inc. P.O. Box 31 Barberton, Ohio 44203 (216) 848-4161

Barberton Technical Center
Chemicals

(b) (4)

[redacted]

APPROVALS

ISSUED BY: R. B. Pfost
R. B. PFOST

APPROVED BY D. K. Krass
D. K. KRASS

APPROVED BY _____
STAN CHIRAS, DIAZ

CHEVRON CHEMICAL PURCHASE STOCK SPECIFICATION

PAGE 1

I. CHEMICAL NAME/DESCRIPTION: Acid, Hydrochloric

II. BUYER'S GUIDE #: 0180 REVISION DATE: 10/26/84

III. MIB #: 514 SUPERSEDES: 5/15/84

IV. SPECIFICATIONS:

TEST NAME	TEST METHOD	SPECIFICATIONS MIN	SPECIFICATIONS MAX	TYPICAL
Gravity, 60°F, Baume		20.0		
Specific Gravity, 60°/60°F				1.160
Density at 60°F, lb/gal				9.7
Assay (as HCl), wt.%		31.45		
Color	$FeCl_3$ method		2.3	
Non-volatile residue, %			0.04	
* Appearance				Colorless or slightly yellowish liquid

V. ADDITIONAL COMMENTS (NONPROPRIETARY):

* INDICATES CHANGE.

RESEARCH SERVICES

DEC 26 1984

CHEMICAL NAME/DESCRIPTION: Hydrochloric Acid

VI. QUALITY CONTROL INSTRUCTIONS:

• VII. QUALIFIED SUPPLIERS:

SUPPLIER	TRADE NAME	REFERENCE(S)
Van Waters & Rogers	Hydrochloric Acid, Technical (31%)	

VIII. REJECTED SUPPLIERS:

SUPPLIER	TRADE NAME	REASON FOR REJECTION (REFERENCE)

IX. ADDITIONAL COMMENTS

• INDICATES CHANGE.

CHEVRON CHEMICAL PURCHASE STOCK SPECIFICATION

PAGE 1

I. CHEMICAL NAME/DESCRIPTION: Methylene Chloride

II. BUYER'S GUIDE #: C-4760 REVISION DATE: 1/7/85

III. MIB #: 627 SUPERCEDES: 10/26/84

IV. SPECIFICATIONS:

TEST NAME	TEST METHOD	SPECIFICATIONS MIN	SPECIFICATIONS MAX	TYPICAL
Boiling Range, @ 760 MM Hg, °C		39.4	41.5	
Color, Apha			10	
Acidity as HCl, PPM			5	
Water, PPM			100	
Specific Gravity, 25/25°C				1.316-1.323
Free Halogens	ACS		None	
Evaporation Residue, ppm			20	

V. ADDITIONAL COMMENTS (NONPROPRIETARY):

CHEMICAL NAME/DESCRIPTION: Methylene Chloride

VI. QUALITY CONTROL INSTRUCTIONS:

VII. QUALIFIED SUPPLIERS:

	SUPPLIER	TRADE NAME	REFERENCE(S)
1	* Vulcan Materials Co.	Methlene Chloride	
	* Chemicentral	Methlene Chloride	
2	* LCP Chemicals & Plastics, Inc.	Methlene Chloride	

VIII. REJECTED SUPPLIERS:

SUPPLIER	TRADE NAME	REASON FOR REJECTION (REFERENCE)

IX. ADDITIONAL COMMENTS

* INDICATES CHANGE

D-3

CHEVRON CHEMICAL PURCHASE STOCK SPECIFICATION

PAGE 1

PSS #4517

I. CHEMICAL NAME/DESCRIPTION: Caustic Soda, 50% Soln

II. BUYER'S GUIDE #: C-1860 REVISION DATE: 5/7/84

III. MIB #: 134

IV. SPECIFICATIONS:

TEST NAME	TEST METHOD	SPECIFICATIONS MIN	SPECIFICATIONS MAX	TYPICAL
Sodium Hydroxide (NaOH) % wt		48.5		50.1
Sodium Oxide (Na_2O) % wt		37.6		38.8
Sodium Carbonate (Na_2CO_3) % wt			0.25	0.12
Sodium Chloride (NaCl) % wt			1.20	0.54
Sodium Sulphate (Na_2SO_4) % wt			0.07	0.04
Sodium Chlorate ($NaClO_3$) % wt			0.25	0.05
Aluminum Oxide (Al_2O_3) ppm			38.0	9.0
Copper (Cu) ppm			2.0	0.5

V. ADDITIONAL COMMENTS (NONPROPRIETARY):

CHEVRON CHEMICAL PURCHASE STOCK SPECIFICATION

PAGE 2 (continued)

PSS #4517

I. CHEMICAL NAME/DESCRIPTION: Caustic Soda, 50% Soln

II. BUYER'S GUIDE #: C-1860 REVISION DATE: 5/7/84

III. MIB #: 134

IV. SPECIFICATIONS:

TEST NAME	TEST METHOD	SPECIFICATIONS MIN	SPECIFICATIONS MAX	TYPICAL
Iron (Fe) ppm			15.0	5.0
Lead (Pb) ppm			0.5	0.25
Magnesium Oxide (MgO) ppm			8.0	3.0
Manganese (Mn) ppm			1.0	0.5
Nickel (Ni) ppm			1.0	0.4
Silicon Dioxide (SiO_2)			100.0	55.0
Specific Gravity 20/20°C				1.525

PSS #4517

CHEMICAL NAME/DESCRIPTION: Caustic Soda, 50% Sol'n.

VI. QUALITY CONTROL INSTRUCTIONS:

VII. QUALIFIED SUPPLIERS:

SUPPLIER	TRADE NAME	REFERENCE(S)
Dow Chemical USA	Caustic Soda 50% Sol'n.	
Stauffer Chem Co.	Caustic Soda 50% Sol'n.*	
PPG Industries	Caustic Soda 50% Sol'n.*	
Occidental Chemical Corp.	Caustic Soda 50% Sol'n.**	
Vulcan Materials Co.	Caustic Soda 50% Sol'n.	

* Mercury Grade

** From Tacoma only mercury grade

VIII. REJECTED SUPPLIERS:

SUPPLIER	TRADE NAME	REASON FOR REJECTION (REFERENCE)

IX. ADDITIONAL COMMENTS

CHEVRON CHEMICAL PURCHASE STOCK SPECIFICATION

PAGE 1

PSS #

I. CHEMICAL NAME/DESCRIPTION: Sodium Hypochlorite, 12.5% Solution

II. BUYER'S GUIDE #: C-7200 REVISION DATE: 6/1/84

III. MIB #:

IV. SPECIFICATIONS:

TEST NAME	TEST METHOD	SPECIFICATIONS MIN	SPECIFICATIONS MAX	TYPICAL
Available Chlorine, wt %				13.4
Sodium Hypochlorite, wt %		12.5		14.1
Specific Gravity, 20°/20°C				1.227
Excess Caustic, gm/l				9.75
Density, lb/gal				10.24
pH, 20°C				13.2

V. ADDITIONAL COMMENTS (NONPROPRIETARY):

RESEARCH SERVICES

SEP 11 1984

PSS #

CHEMICAL NAME/DESCRIPTION: Sodium Hypochlorite, 12.5% Solution

VI. QUALITY CONTROL INSTRUCTIONS:

VII. QUALIFIED SUPPLIERS:

SUPPLIER	TRADE NAME	REFERENCE(S)
Jones Chemicals, Inc.	Sodium Hypochlorite, 12.5% Solution	
Van Waters	Sodium Hypochlorite, 12.5% Solution	

VIII. REJECTED SUPPLIERS:

SUPPLIER	TRADE NAME	REASON FOR REJECTION (REFERENCE)

IX. ADDITIONAL COMMENTS

RESEARCH SERVICES

SEP 11 1984

TOLL PROCESSING AGREEMENT

CTBL

EXHIBIT D

PROCEDURE FOR ANALYZING THE RAW MATERIAL

CTBA

COBRA METHOD NO:CBR-300

CHEVRON CHEMICAL COMPANY
PROCESS LABORATORY
940 Hensley Street
Richmond, CA 94804

DATE: 12/21/89 (AAC) REVISION DATE:01/08/90

TITLE: CTBA ASSAY, USING MEGABORE GAS CHROMATOGRAPHY

PURPOSE AND SCOPE

Weighed samples, diluted in acetonitrile, are derivatized with N-methyl-N-(tert-butyldimethylsilyl)trifluoroacetamide (MTBSTFA) which forms a silyl ester with the CTBA (3-(2-CHLORO-4-TRIFLUOROMETHYL-PHENOXY) BENZOIC ACID). A known amount of dipropylphthalate (DPP), an internal standard, is added. The CTBA standard is treated similarly. The ratio (area derivatized CTBA/area DPP) is measured for both samples and standards, and the percent CTBA is calculated from these ratios and the amounts weighed out.

The method was developed for the intermediate, about 62% CTBA in DMSO. If other types of CTBA samples are to be run, test them out first.

EQUIPMENT

The method was developed with the Hewlett-Packard 5890 GC, coupled with a HP 3396A integrator. If other equipment is used, the conditions may need to be altered. See chromatogram for acceptable separations.

REAGENTS

MTBSTFA	Available from Regis Chemical Company, Cat# 270242. Sample is supplied in a septum sealed vial.
Acetonitrile	Reagent Grade
CTBA Reference Standard	As 844a, NB# 504-845, 99.6% pure
DPP	dipropylphthalate, Eastman Cat# 2755

HP 5890 OPERATING CONDITIONS

Detector	
Type	Flame Ionization
Temperature	300°C
Inlet	
Type	capillary split
Temperature	160°C
Operating Mode	split; purge on
Oven	
Type	Temperature program (1 ramp)
Initial temperature	50°C
Hold time	1 minute
Ramp rate	10°C
Final temperature	230°C
Hold time	15 minutes
Equilibrium time	1 minute
Column	
Type	J&W Durabond megabore
Stationary Phase	DB-5; 1.5 micron thick
Dimensions	30 meters x 0.53 mm ID
Flow Rates	
Carrier (He)	15 ml/min.
Hydrogen	30 ml/min.
Air	300 ml/min.
Make-up (Nitrogen)	15 ml/min.
Split vent (He)	75 ml/min.
Septum purge (He)	5 ml/min.
Sample injection	
Type	Syringe with Chaney adapter
Volume	1 microliter

HEWLETT-PACKARD PACKARD 3396A INTEGRATOR SETTINGS

Zero	1
Attenuation	2
Area Reject	1000
Chart Speed	0.5 cm/min.
Threshold	1
Peak Width	0.10
Integration Start	10 minutes

SAMPLE PREPARATION

INTERNAL STANDARD SOLUTION: Make up a solution containing approximately 2.5 mg of dipropylphthalate (DPP) per ml of acetonitrile.

REFERENCE STANDARD: Accurately weigh about 0.1 g of CTBA analytical standard into a 50 ml volumetric flask. Dilute to volume with acetonitrile. Pipet 1 ml of this solution into a vial. Add 25 ul of MTBSTFA and 1 ml of the internal standard solution. Cap and shake the vial.

SAMPLES: Accurately weigh a sample size calculated to contain 0.1 g CTBA into a 50 ml volumetric flask. For CTBA in DMSO, the usual samples, this is 0.17g. Dilute to volume with acetonitrile. Pipet 1 ml into a vial; add 25 microliters of MTBSTFA; pipet 1 ml of the internal standard solution; cap and shake.

INJECTION SEQUENCE

Inject the reference standard solution until the ratio of CTBA/DPP reproduces within 2 %. Inject one to three sample solutions. Reinject the standard solution.

CALCULATIONS

$$\%\text{CTBA} = \frac{R(sa) \times W(std) \times \%\text{purity (std)}}{\text{Avg } R(std) \times W(sa)}$$

Avg R(std) = average area of CTBA standards divided by average area DPP for the two standard injections

R(sa) = area CTBA in sample divided by area for DPP

W(std) = weight of CTBA standard (ca. 0.10 g)

W(sa) = weight of CTBA sample (ca. 0.17 g)

% purity = purity of reference standard in percent

ISOMERIC IMPURITIES

In some cases it might be useful to estimate iso-CTBA and para-CTBA.

I-CTBA = area I-CTBA / area CTBA * % CTBA from assay

% P-CTBA = area P-CTBA / area CTBA * % CTBA from assay

See chromatogram for retention times of CTBA, I-CTBA and P-CTBA.

ISOMERIC IMPURITIES (CONTINUED)

Relative to CTBA, the retention of I-CTBA is 0.97 and for P-CTBA it is 1.02.

CTBA	3-[2-chloro-4-(trifluoromethyl)phenoxy] benzoic acid
I-CTBA	3-[2-chloro-5-(trifluoromethyl)phenoxy] benzoic acid
P-CTBA	4-[2-chloro-4-(trifluoromethyl)phenoxy] benzoic acid
DPP	dipropyl phthalate
MTBSTFA	N-methyl-N-(tert-butyldimethylsilyl) trifluoroacetamide

REPRODUCIBILITY:

Four different weights of Sample # C-89-338, CTBA in DMSO were analyzed on two different instruments with the following results.

% I-CTBA	% CTBA	% P-CTBA
4.82	60.13	0.30
4.74	59.86	0.29
4.73	60.04	0.28
4.77	60.44	0.29
4.75	60.11	0.28
4.83	60.54	0.29
4.97	60.18	0.30
4.98	60.37	0.29
4.96	59.76	0.29
Average		
4.84	60.15	0.29
Standard Deviation		
0.10	0.26	0.007
Coefficient of Variation		
2.07	0.43	2.44

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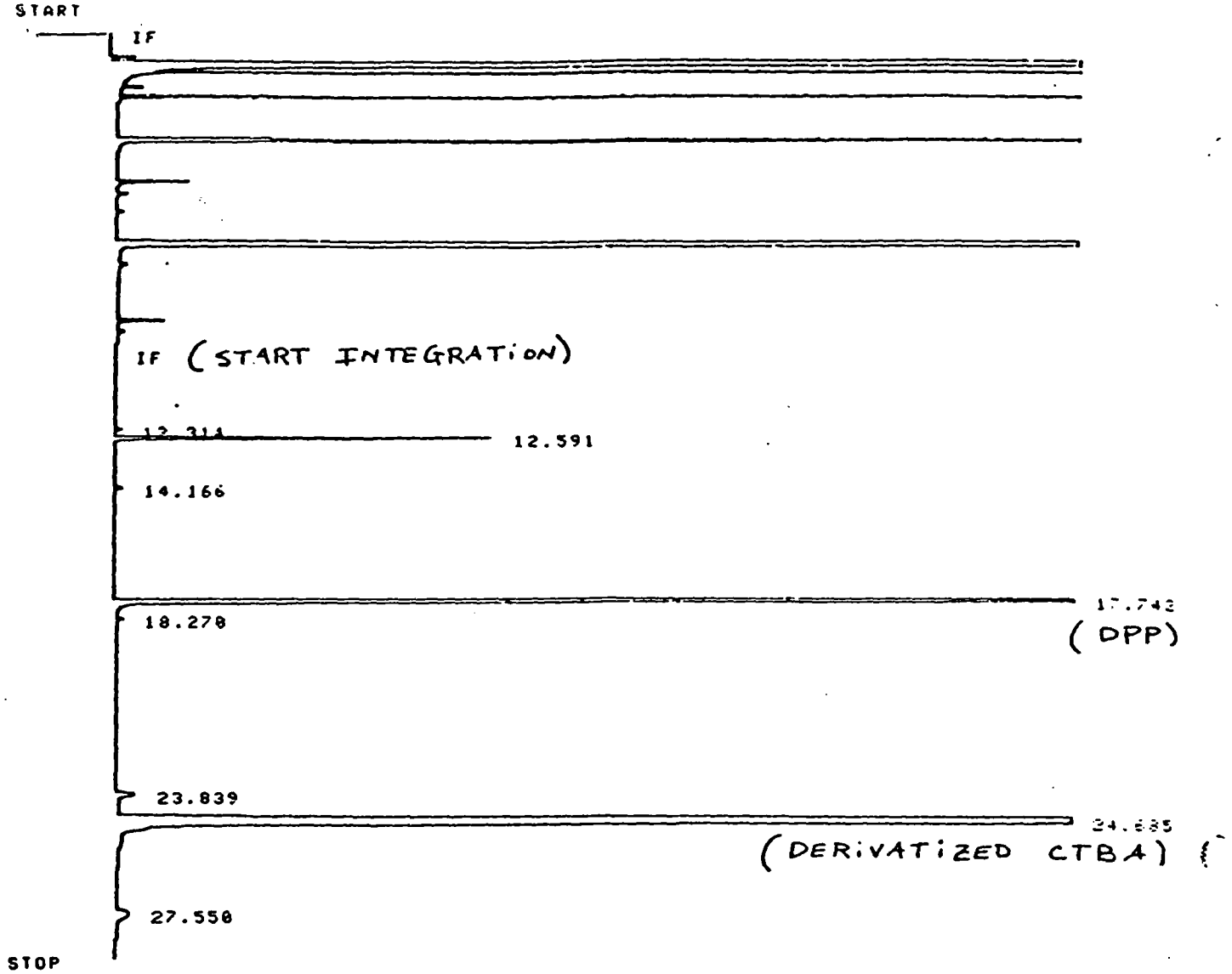

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DIRECTORY FULL

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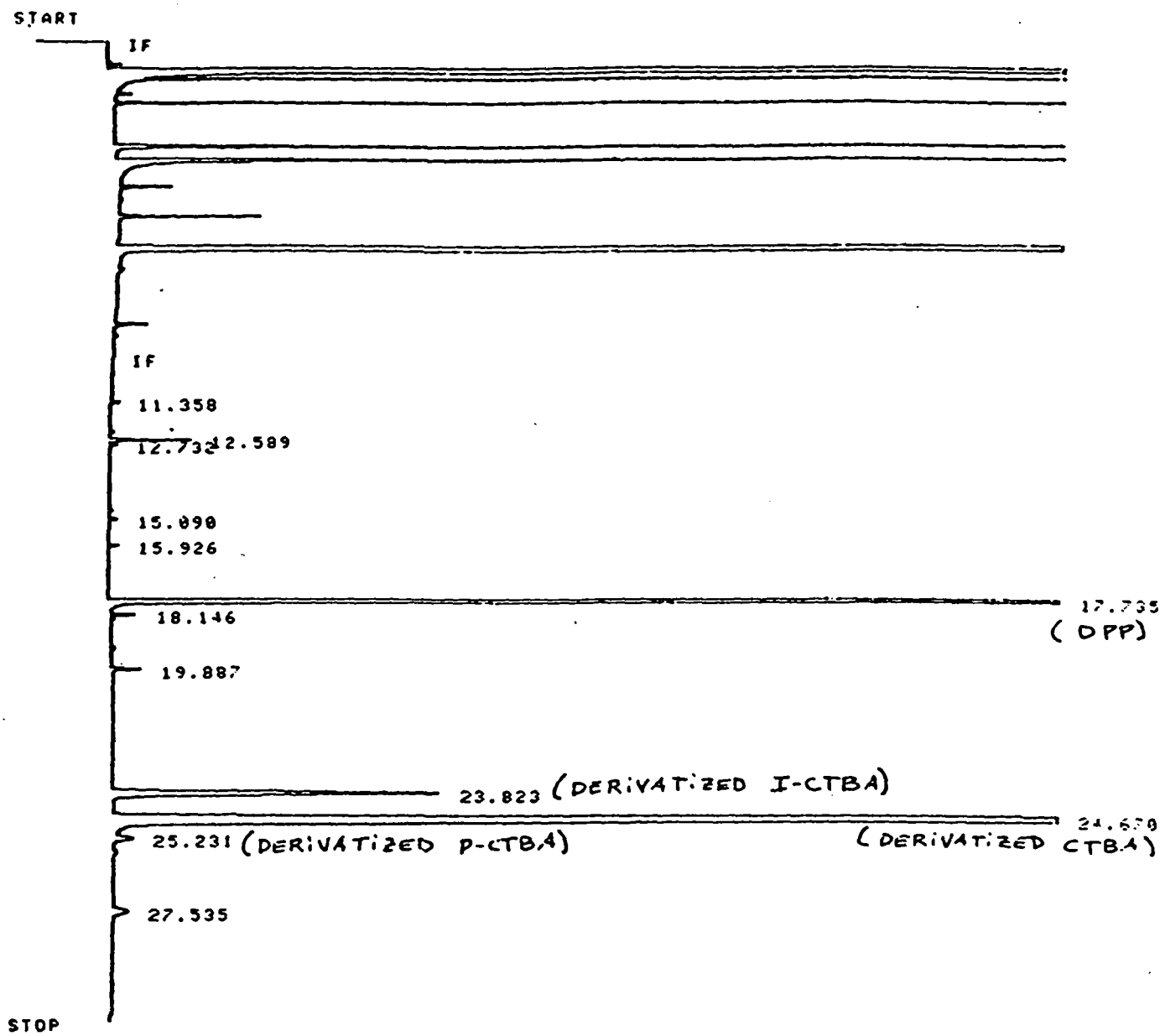
AREA%

RT	AREA	TYPE	WIDTH	AREA%
12.591	45165	BV	.060	1.57118
14.166	1550	BB	.081	.05392
17.742	1418506	PB	.052	49.34634
23.839	5736	PB	.147	.19954
24.685	1395536	PB	.135	48.54726
27.550	8100	BB	.283	.28178

TOTAL AREA=2874594
MUL FACTOR=1.0000E+00

CTBA ASSAY

CTBA ANALYTICAL STANDARD



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DIRECTORY FULL

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AREA%

RT	AREA	TYPE	WIDTH	AREA%
11.358	1065	PB	.050	.04736
12.589	9925	BV	.060	.44136
15.090	1203	PB	.056	.05350
15.926	1345	PB	.054	.05981
17.735	1076564	PB	.053	47.87400
18.146	2690	BP	.050	.11962
19.887	4129	BB	.067	.18361
23.823	81786	PB	.125	3.63696
24.670	1057744	PB	.134	47.03707
25.231	5151	BP	.136	.22906
27.535	7143	BB	.197	.31764

TOTAL AREA=2248746

CTBA ASSAY

CTBA in DMSO C-89-339

COBRA METHOD NO:CBR-400

CHEVRON CHEMICAL COMPANY
PROCESS LABORATORY
940 Hensley Street
Richmond, CA 94804

DATE: 12/21/89 (AAC) REVISION DATE:01/08/90

TITLE: DETERMINATION OF SIGNIFICANT IMPURITIES (DBTS, CTT, CTA, CTBOAC) RELATED TO CTBA, USING MEGABORE GAS CHROMATOGRAPHY

PURPOSE AND SCOPE

Weighed samples, diluted in acetonitrile, are derivatized with N-methyl-N-(tert-butyldimethylsilyl)trifluoroacetamide (MTBSTFA) which forms a silyl ester with the CTBA (3-(2-CHLORO-4-TRIFLUOROMETHYL-PHENOXY) BENZOIC ACID), but does not affect the significant impurities (DBTS, CTT, CTA, CTBOAC). A known amount of internal standard, dipropylphthalate (DPP), is added. A standard containing known amounts of each impurity is treated similarly. The ratio (area each impurity /area DPP) is measured for both samples and standards. The percent of each impurity is calculated from these ratios and the amount of sample weighed out.

EQUIPMENT

The method was developed with the Hewlett-Packard 5890 GC coupled with a HP 3396A integrator. If other equipment is used, the conditions may need to be altered. See chromatogram for acceptable separations.

REAGENTS

MTBSTFA	Available from Regis Chemical Company, Cat# 270242. Sample is supplied in a septum sealed vial.
Acetonitrile	Reagent Grade
Standards	DBTS, CTT, CTA, and CTBOAC
DPP	dipropylphthalate, Eastman Cat# 2755

HP 5890 OPERATING CONDITIONS

Detector	
Type	Flame Ionization
Temperature	300^{0}C

HP 5890 OPERATING CONDITIONS (CONTINUED)

Inlet	
Type	capillary split
Temperature	160°C
Operating Mode	split; purge on
Oven	
Type	Temperature program (1 ramp)
Initial temperature	50°C
Hold time	1 minute
Ramp rate	10°C
Final temperature	230°C
Hold time	15 minutes
Equilibrium time	1 minute
Column	
Type	J&W Durabond megabore
Stationary Phase	DB-5; 1.5 micron thick
Dimensions	30 meters X 0.53 mm ID
Flow rates	
Carrier (He)	15 ml/min.
Hydrogen	30 ml/min.
Air	300 ml/min.
Make-up (Nitrogen)	15 ml/min.
Split vent (He)	75 ml/min.
Septum purge (He)	5 ml/min.
Sample injection	
Type	Syringe with Chaney adapter
Volume	1 microliter

HEWLETT-PACKARD 3396A INTEGRATOR SETTINGS

Zero	1
Attenuation	2
Area Reject	1000
Chart Speed	0.5 cm/min.
Threshold	1
Peak Width	0.10
Integration Start	10 minutes

SAMPLE PREPARATION

INTERNAL STANDARD SOLUTION: Make up a solution containing approximately 0.25 mg of dipropylphthalate (DPP) per ml of acetonitrile. This is 1/10 the concentration of the I.S. used for assay of CTBA.

SAMPLE PREPARATION (CONTINUED)

MIXED IMPURITY REFERENCE STANDARD: Using reference standards of known purities, make up a solution containing (1 mg DBTS + 2 mg CTT + 4 mg CTA + 4 mg CTBOAC) in 50 ml acetonitrile. A standard solution labeled "CTBA Impurities" is available. It has the following weights in 50 ml acetonitrile:

1.314 mg DBTS
2.029 mg CTT
3.973 mg CTA
3.507 mg CTBOAC

IMPURITY STANDARD: Pipet 1 ml "CTBA Impurities" into a vial and add 100 ul MTBSTFA, via syringe. Pipet 1 ml of internal standard solution into the same vial. Cap and shake.

SAMPLES: For samples of CTBA in DMSO, accurately weigh a sample of approximately 1.7 g into a 50 ml volumetric flask. Dilute to volume with acetonitrile. Pipet 1 ml into a vial; add 100 ul of MTBSTFA; pipet 1 ml of the internal standard solution; cap and shake.

INJECTION SEQUENCE

Inject the reference standard solution until the ratio of CTA/DPP reproduces within 2%. Inject one to three sample solutions. Reinject the standard solution.

RELATIVE RETENTION TIMES

The retention times relative to DPP are:

DBTS 0.64
CTT 0.90
CTA 1.02
CTBOAC 1.12

Identify the peaks in the "Impurity Standard" and in the samples from the relative retention times. From the areas for each peak, calculate the amount of each present.

CALCULATIONS

$$\%CTT = \frac{R(sa) \times W(std) \times \text{purity CTT}}{\text{Avg } R(std) \times W(sa)}$$

Avg R(std) = average area of CTT in standard divided by average area DPP for the two standard injections

CALCULATIONS (CONTINUED)

R(sa)	=	area CTT in sample divided by area for DPP
W(std)	=	weight of CTT in mixed standard (ca. 2 mg)
W(sa)	=	weight of CTBA sample (ca. 1,700 mg)
% purity	=	purity of CTT used for reference standard

Use the same type of calculation to determine percentages of DBTS, CTA and CTBOAC.

ABBREVIATIONS

CTBA	3-[2-chloro-4-(trifluoromethyl)phenoxy] benzoic acid
CTT	3-[2-chloro-4-(trifluoromethyl)phenoxy] toluene
CTA	3-[2-chloro-4-(trifluoromethyl)phenoxy] benzaldehyde
CTBOAC	3-[2-chloro-4-(trifluoromethyl)phenoxy] benzyl acetate
DBTS	3-chloro-4-(methylthio) benzotrifluoride
DPP	dipropyl phthalate
MTBSTFA	N-methyl-N-(tert-butyldimethylsilyl) trifluoroacetamide

REPRODUCIBILITY

CTBA in DMSO, sample # C-89-339, was run five times with the following repeatability.

% DBTS	% CTT	% CTA	% CTBOAC
0.10	0.036	0.23	0.25
0.10	0.037	0.23	0.25
0.10	0.037	0.24	0.26
0.10	0.035	0.23	0.26
0.10	0.036	0.24	0.25

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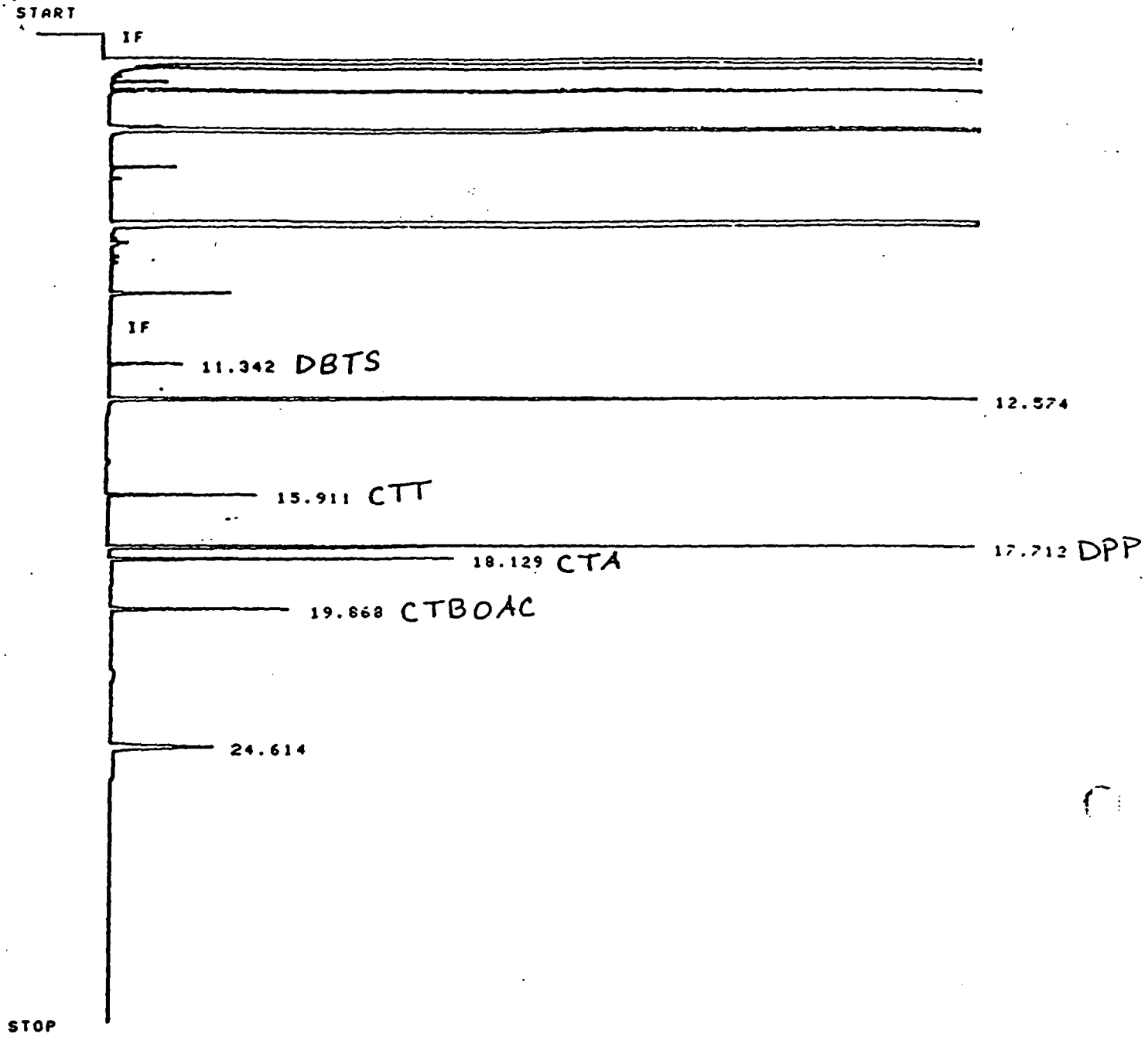

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DIRECTORY FULL
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DIRECTORY FULL

RUN# 232 DEC 20, 1989 17:36:42

AREA%

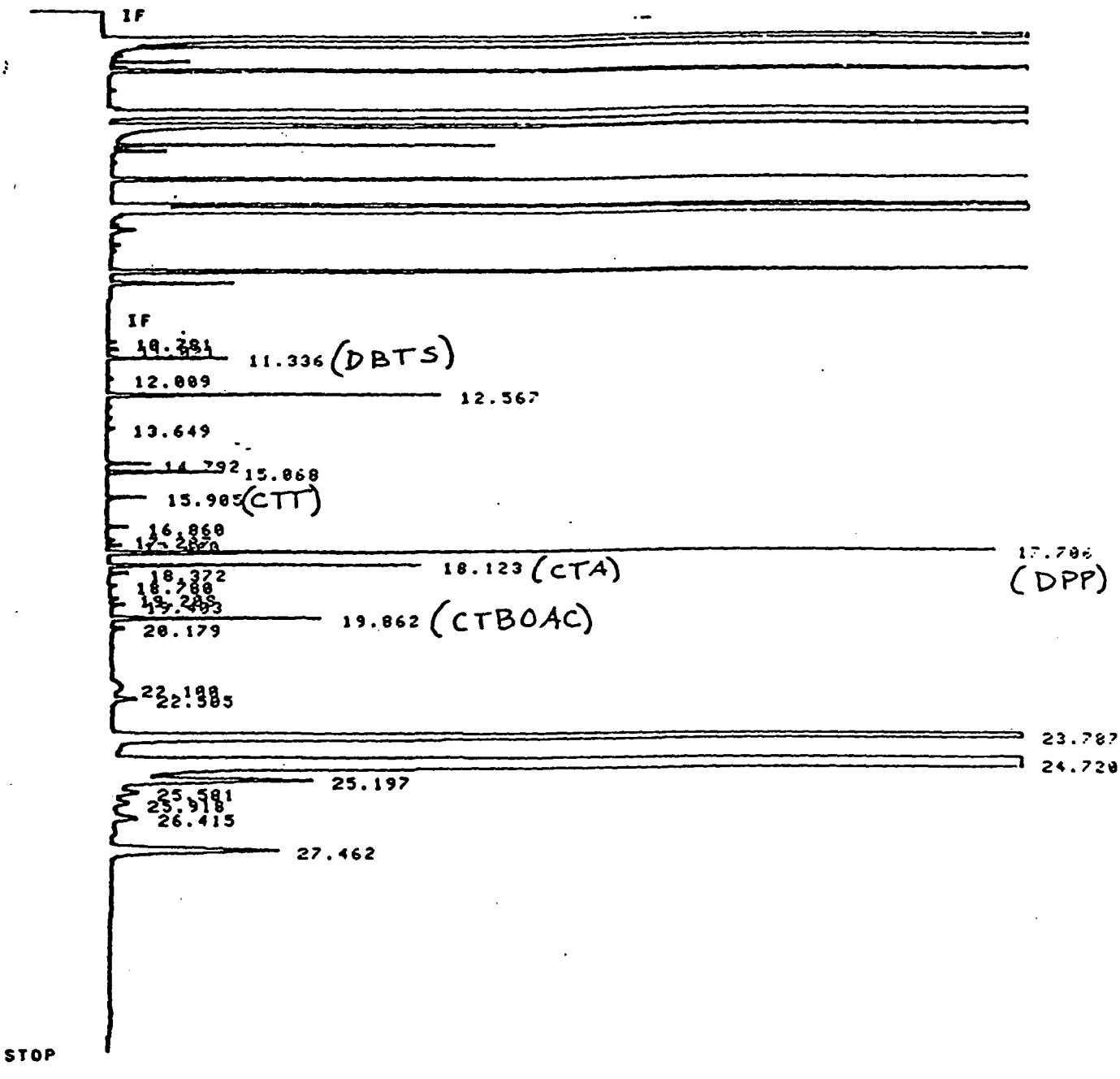
	RT	AREA	TYPE	WIDTH	AREA%
DBTS	11.342	8214	BB	.049	2.09221
	12.574	175867	BV	.060	44.79558
CTT	15.911	16996	BB	.052	4.32918
	17.712	98831	PB	.052	25.17352
CTA	18.129	38686	PB	.052	9.83344
CTBOAC	19.868	24646	PB	.063	6.27765
	24.614	29439	PB	.133	7.49849

TOTAL AREA= 392599

CTBA IMPURITIE

STANDARD MIX

4. RUN 8 231 DEC 28, 1989 16:56:33



CTBA IMPURITIES

SAMPLE C-89-378 CTBA IN DMSO

TOLL PROCESSING AGREEMENT

CTBL

EXHIBIT E

PLANT PREPARATION AND CLEAN-UP DESCRIPTION

EXHIBIT E

CEDAR PLANT PREPARATION AND CLEANUP FEE

The fee was actuated by the verbal agreement on May 29, 1991 that Cedar would produce CTBL in 1991, 1992 & 1993. The fee will cover certain activities until startup of CTBL production (defined as introduction of chemicals into the processing equipment.) Also it will cover certain activities subsequent to production shutdown (when the CTBL has been produced and packaged for shipment.) The fee will apply to years subsequent to 1991 because the separation between production campaigns is long.

The specific activities covered are:

1. Engineering work leading to the written operating procedures. Engineering work associated with equipment design and plant modification is not covered, but is included in the capital fee.

2. Process safety review.

3. Analytical method confirmation.

4. Laboratory process feasibility trials.

5. Operator training.

6. Environmental review and application for operating and disposal permits.

7. Location of waste disposal sites and contract negotiation.

8. Establishing supply sources for raw materials to be purchased by Cedar.

9. Receipt of raw materials and storage prior to startup.

10. Setup of record keeping procedures.

11. Cleanout of equipment and water batching prior to startup.

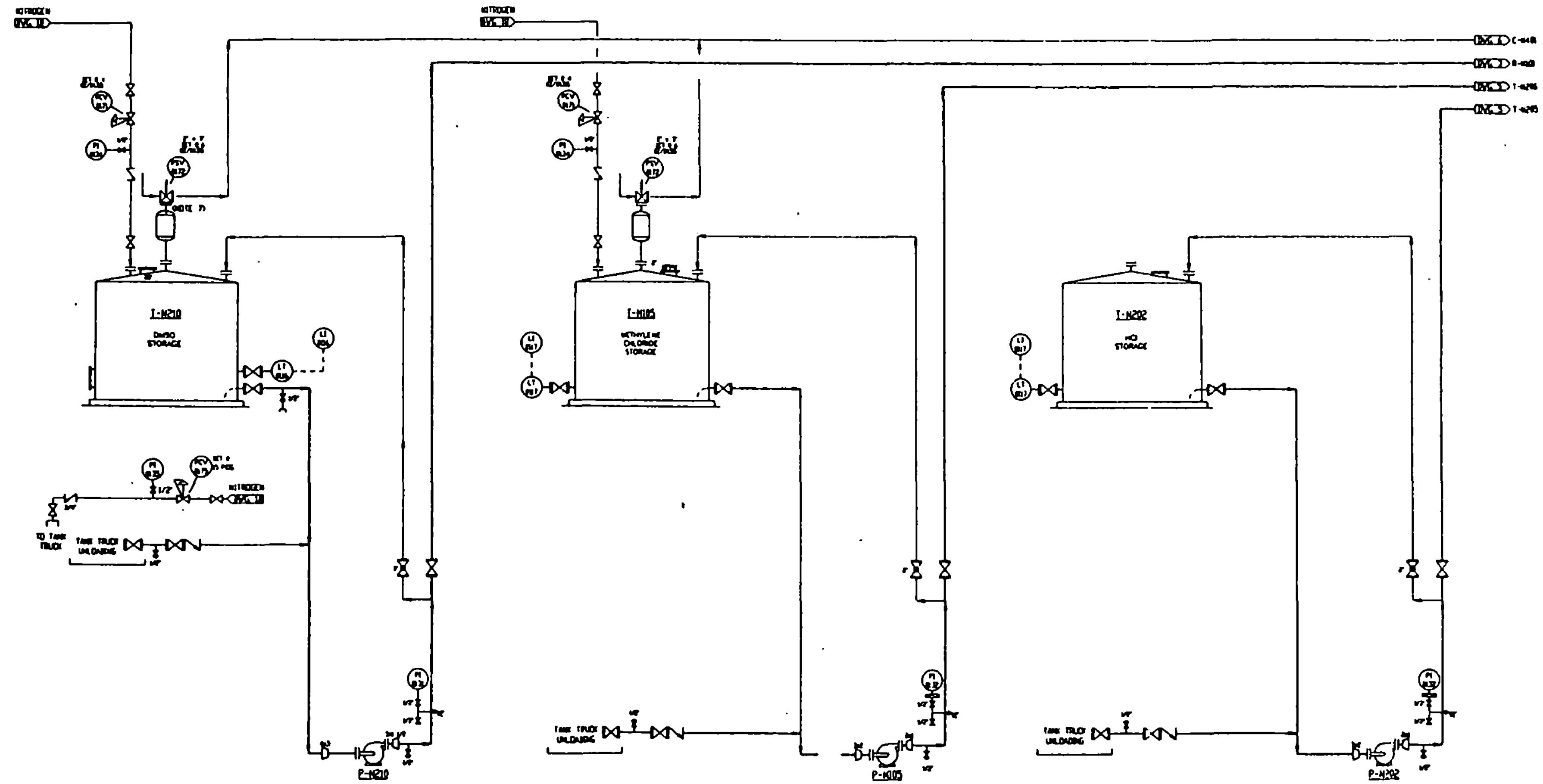
12. Cleanout of equipment after production and arranging for disposal of cleanout materials.

TOLL PROCESSING AGREEMENT

CTBL

EXHIBIT F

PRELIMINARY P&ID



NO	REVISIONS	DATE	BY	CHKD	APPR
	ISSUED FOR ENGINEERING				

	BY	DATE
DRAWN	[illegible]	[illegible]
CHKD		
APPR		
APPR		

CEDAR CHEMICAL CORPORATION
WEST HELENA, ARKANSAS

UNIT4

COBRA PROCESS
ESTERIFICATION
RAW MATERIALS

SCALE	DWG	REV
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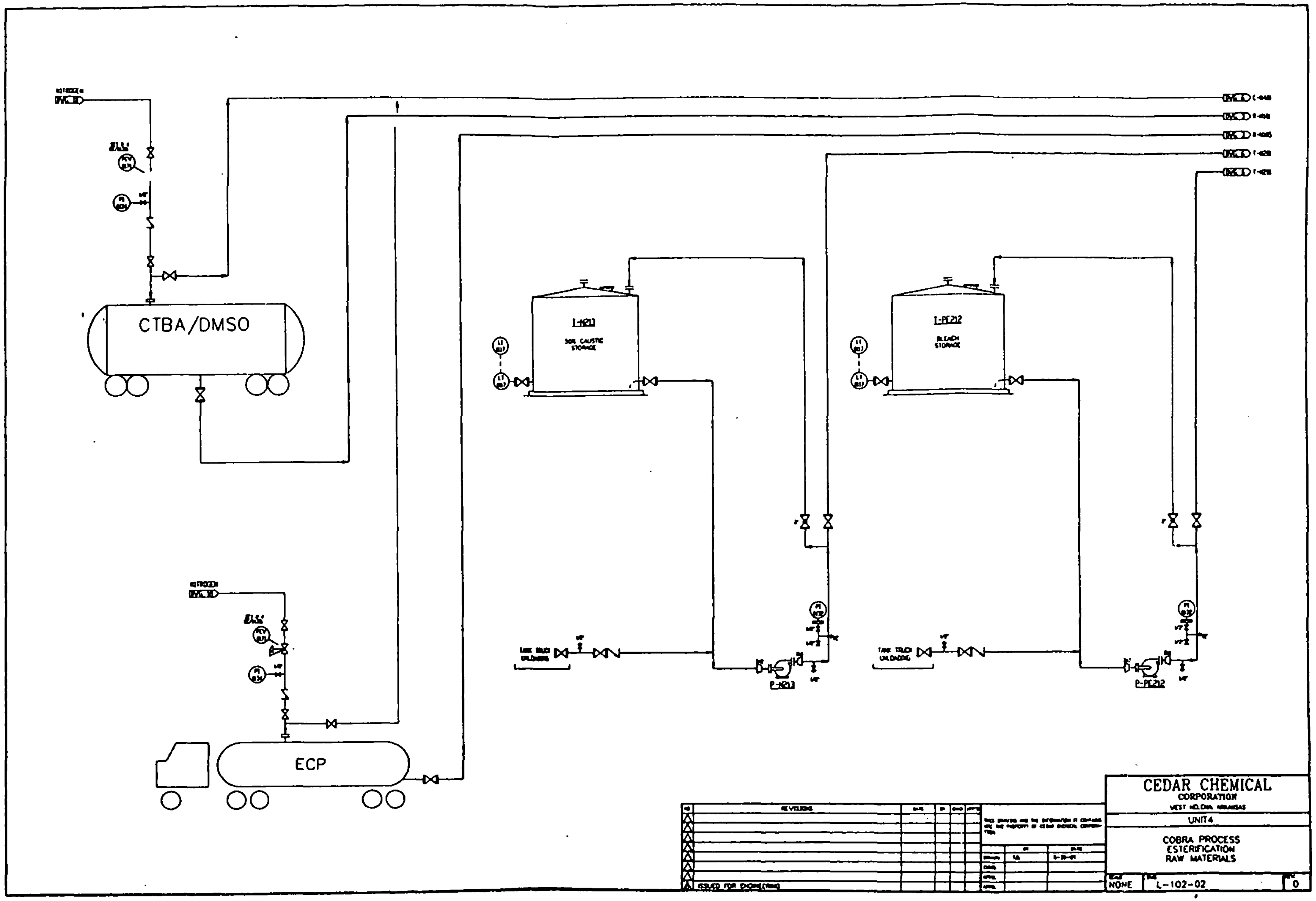
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SOL CAUSTIC STORAGE
T-PE212
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CEDAR CHEMICAL
CORPORATION
UNIT4
COBRA PROCESS
ESTERIFICATION
RAW MATERIALS
ISSUED FOR ENGINEERING
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L-102-02
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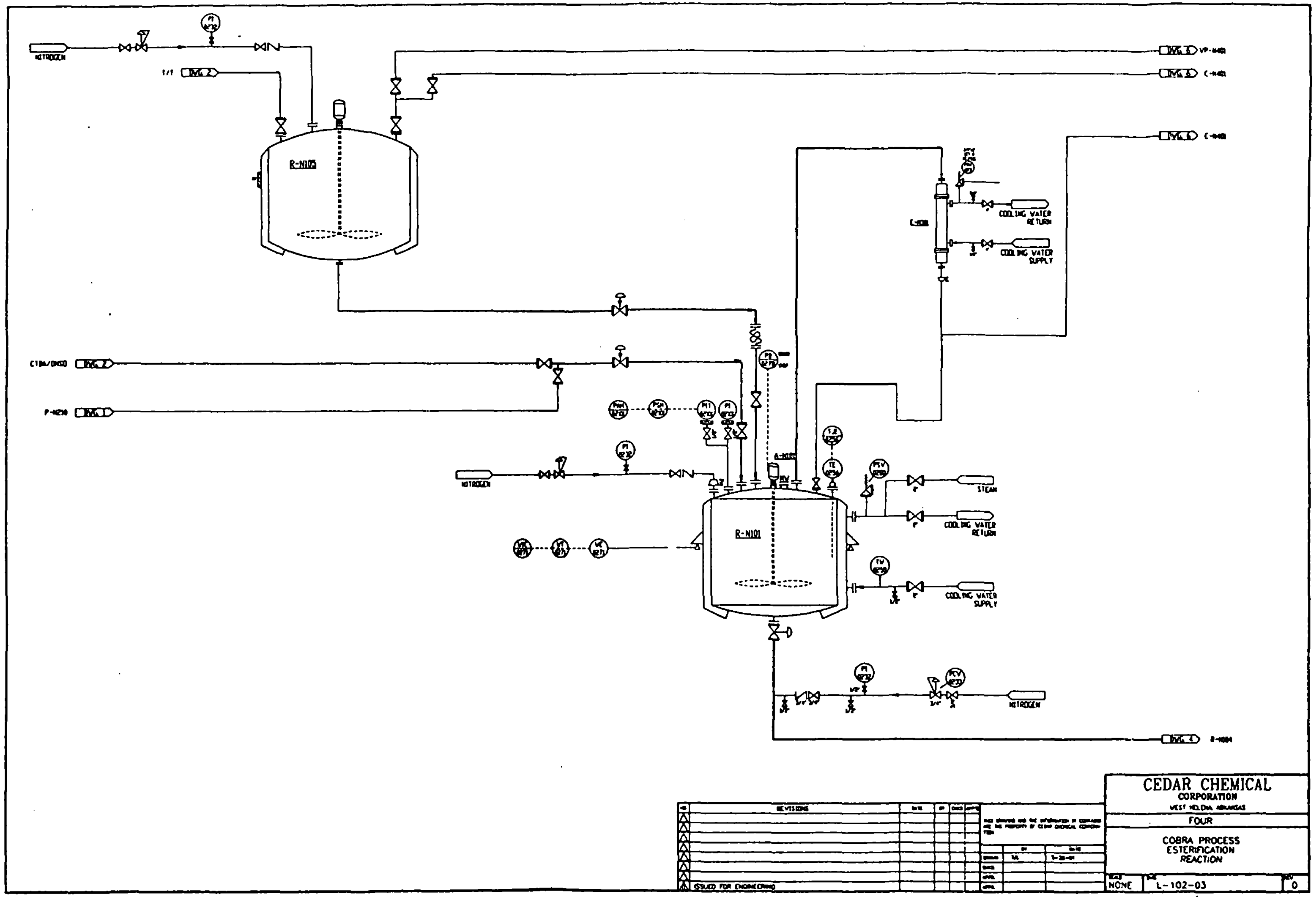

NITROGEN
R-N105
R-N101
STEAM
COOLING WATER RETURN
COOLING WATER SUPPLY
REVISIONS
ISSUED FOR ENGINEERING
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CORPORATION
WEST HELENA ARKANSAS
FOUR
COBRA PROCESS
ESTERIFICATION
REACTION
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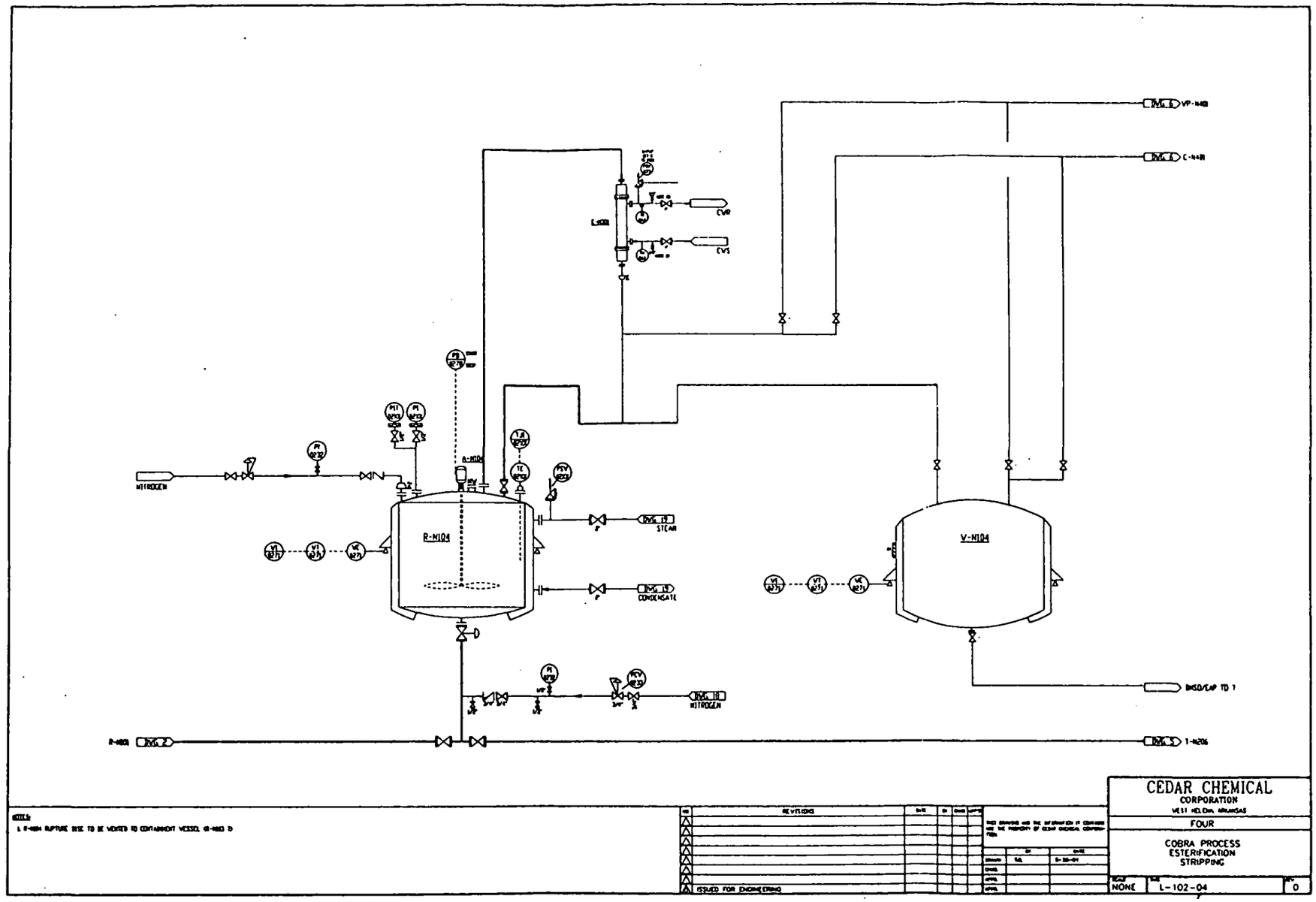
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CONDENSATE
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CVP
CVS
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ISSUED FOR ENGINEERING
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CORPORATION
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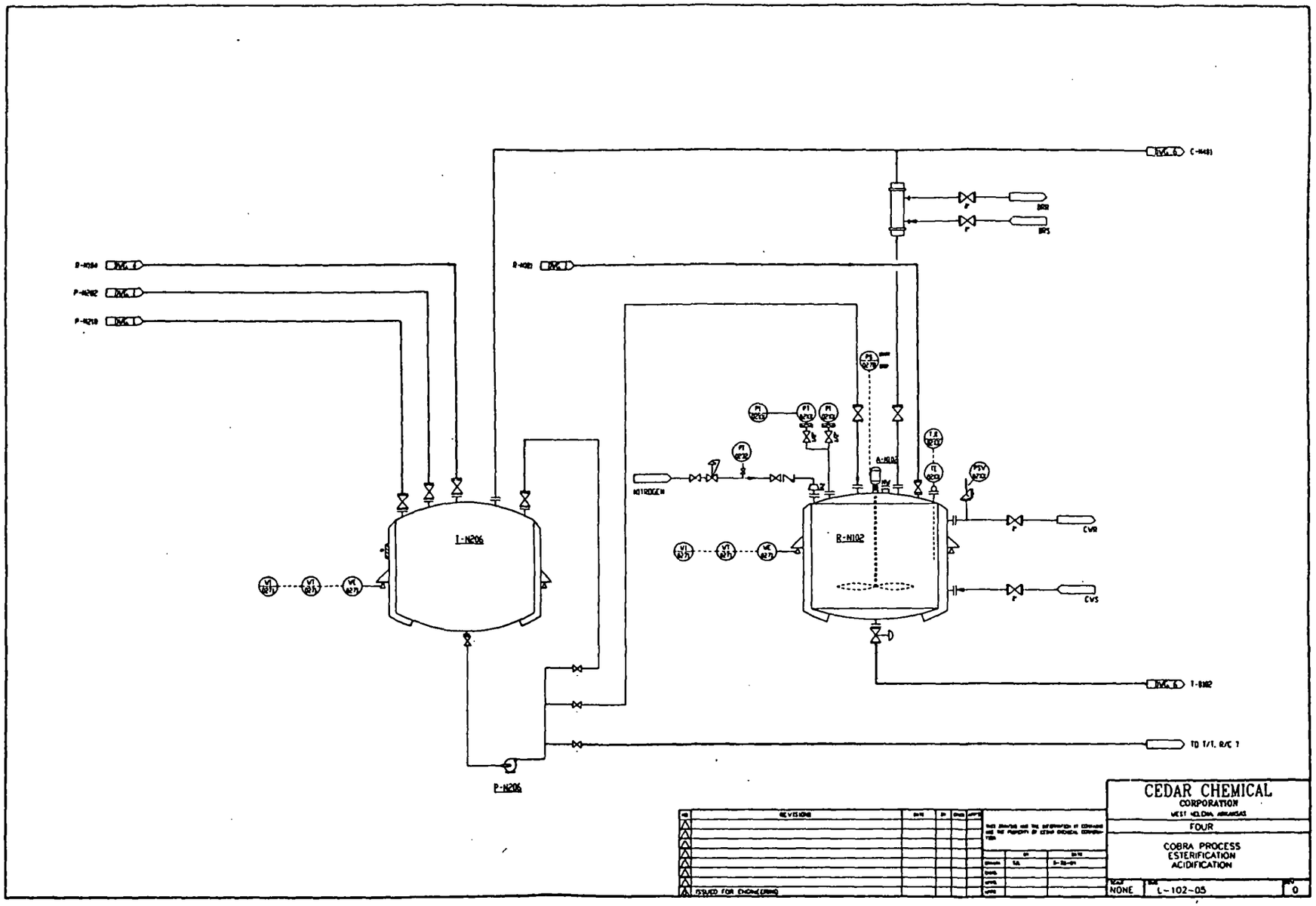
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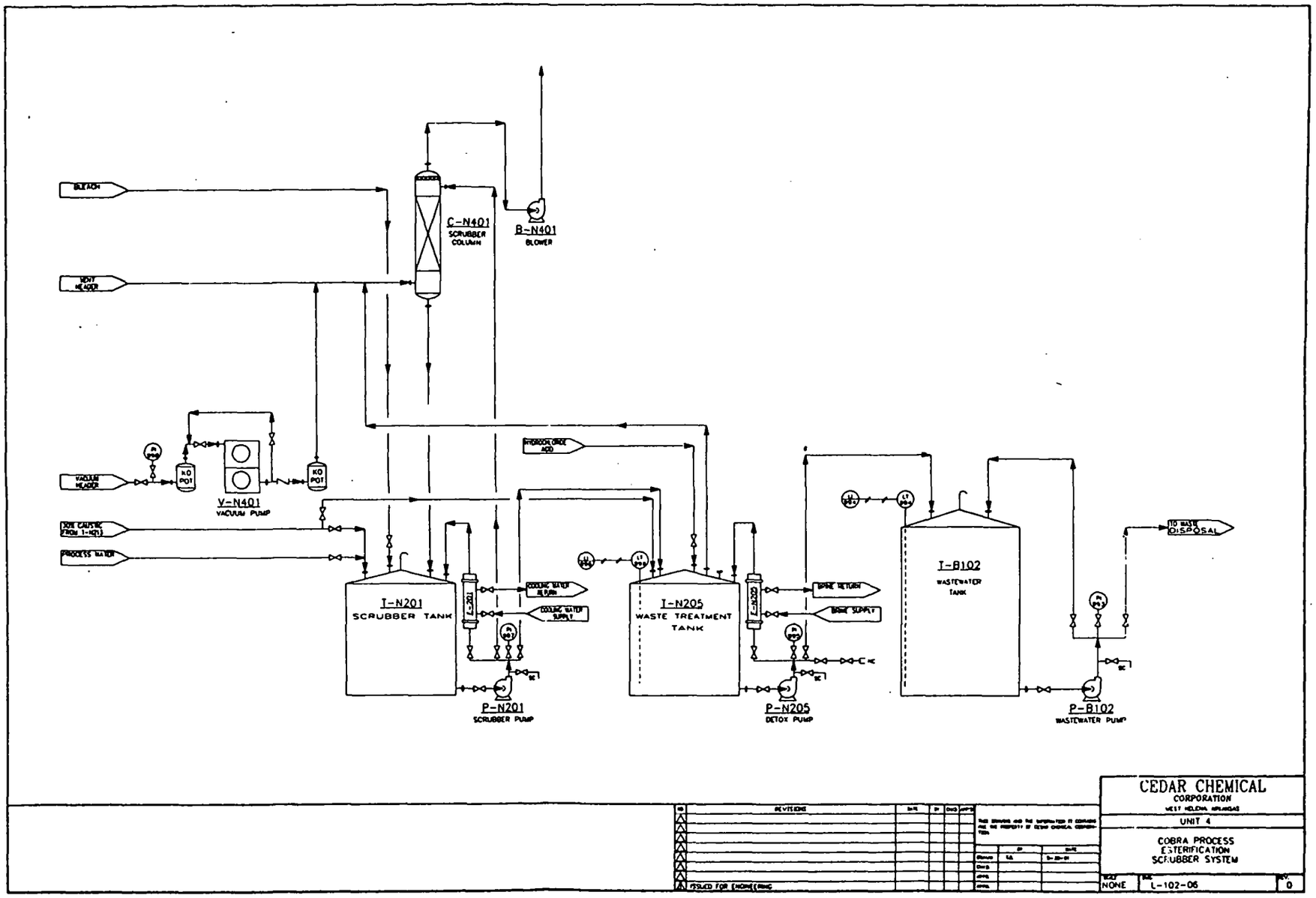
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VENT HEADER
C-N401
SCRUBBER COLUMN
B-N401
BLOWER
VACUUM HEADER
KO POT
KO POT
V-N401
VACUUM PUMP
25% CAUSTIC FROM T-401
PROCESS WATER
HYDROGEN PEROXIDE ACID
I-N201
SCRUBBER TANK
COOLING WATER RETURN
COOLING WATER SUPPLY
P-N201
SCRUBBER PUMP
I-N205
WASTE TREATMENT TANK
BRINE RETURN
BRINE SUPPLY
P-N205
DETOX PUMP
I-B102
WASTEWATER TANK
TO WASTE DISPOSAL
P-B102
WASTEWATER PUMP
REVISIONS
ISSUED FOR ENGINEERING
CEDAR CHEMICAL
CORPORATION
WEST HELENA, ARKANSAS
UNIT 4
COBRA PROCESS
ESTERIFICATION
SCRUBBER SYSTEM
NONE
L-102-06
0

TOLL PROCESSING AGREEMENT

CTBL

EXHIBIT G

PROCEDURE FOR ANALYZING PRODUCT

COBRA METHOD NO:CBR-500

CHEVRON CHEMICAL COMPANY
PROCESS LABORATORY
940 Hensley Street
Richmond, CA 94804

DATE: 12/28/89 (AAC) REVISION DATE:01/05/90

TITLE: CTBL ASSAY, USING MEGABORE GAS CHOMATOGRAPHY

PURPOSE AND SCOPE

Weighed samples are diluted in acetonitrile. A known amount of di-octylphthalate (DOP), an internal standard, is added. The CTBL (1-(CARBOETHOXY) ETHYL 3-[2-CHLORO-4-(TRIFLUOROMETHYL) PHENOXY] BENZOATE) standard of known purity is treated similarly. The ratio (area CTBL/area DOP) is measured for both samples and standards and the percent CTBL in the samples is calculated from these ratios and the amounts weighed out. The method can be used for the intermediate (ca. 60% CTBL in methylene chloride) and for technical CTBL (ca. 85% CTBL). If othertypes of CTBL samples are to be run, test them out first.

EQUIPMENT

The method was developed with the Hewlett-Packard 5890 GC, coupled with an HP 3396A integrator. If other equipment is used, the conditions may need to be altered. See chromatogram for acceptable separations.

REAGENTS

1. Acetonitrile, Reagent Grade
2. CTBL Reference Standard, PG-00007, NB# 10150-29, 98.4% pure
3. DOP dioctylphthalate, Eastman Cat# 6479

HP 5890 OPERATING CONDITIONS

Detector	
Type	Flame Ionization
Temperature	300^{0}C
Inlet	
Type	capillary split
Temperature	160^{0}C
Operating Mode	split; purge on
Oven	
Type	Temperature program (1 ramp)
Initial temperature	50^{0}C
Hold time	1 minute
Ramp rate	10^{0}C
Final temperature	250^{0}C
Hold time	20 minutes
Equilibrium time	1 minute

GC CONDITIONS (CONTINUED)

Column	
Type	J&W Durabond megabore
Stationary Phase	DB-5; 1.5 micron thick
Dimensions	30 meters X 0.53 mm ID
Flow rates	
Carrier (He)	15 ml/min.
Hydrogen	30 ml/min.
Air	300 ml/min.
Make-up (Nitrogen)	15 ml/min.
Split vent (He)	75 ml/min.
Septum purge (He)	5 ml/min.
Sample injection	
Type	Syringe with Chaney adapter
Volume	1 microliter

HEWLETT-PACKARD 3396A INTEGRATOR SETTINGS

Zero	1
Attenuation	1
Area Reject	1000
Chart Speed	0.5 cm/min.
Threshold	1
Peak Width	0.10
Integration Start	10 minutes

SAMPLE PREPARATION

INTERNAL STANDARD SOLUTION: Make up a solution containing approximately 0.25 milligrams of dioctylphthalate (DOP) per milliliter of acetonitrile.

Caution: DOP must be the straight chain octyl, not a branched chain isomer.

REFERENCE STANDARD: Accurately weigh about 0.1 g of CTBL analytical standard into a 50 ml volumetric flask. Dilute to volume with acetonitrile. Pipet 10 ml of this solution into a 100 ml volumetric flask. Fill to the mark with internal standard solution. Stopper and shake.

SAMPLES: Accurately weigh a sample size calculated to contain 0.1g CTBL into a 50 ml volumetric flask. For technical CTBL, this is 0.12g; for methylene chloride intermediates, it is 0.17g. Dilute to volume with acetonitrile. Pipet 10 ml into a 100 ml volumetric flask and fill to the mark with internal standard solution. Stopper and shake.

INJECTION SEQUENCE

Inject the reference standard solution until the ratio of CTBL/DOP reproduces within 1 %. Inject one to three sample solutions. Reinject the standard solution.

CALCULATIONS

$$\%CTBL = \frac{R(sa) \times W(std) \times \%purity(std)}{Avg\ R(std) \times W(sa)}$$

Avg R(std) = average area of CTBL standards divided by average area DOP for the two standard injections

R(sa) = area CTBL in sample divided by area for DOP

W(std) = weight of CTBL standard (ca. 0.10g)

W(sa) = weight of CTBL sample

% purity = purity of reference standard in percent

ISOMERIC IMPURITIES

In some cases it might be useful to estimate iso-CTBL.

I-CTBL = area I-CTBL / area CTBL * % CTBL from assay

See chromatogram for retention times of CTBL and I-CTBL. Relative to CTBL, the retention of I-CTBL is 0.97.

ABBREVIATIONS:

CTBL 1-(carboethoxy)ethyl 3-[2-chloro-4-(trifluoromethyl) phenoxy] benzoate

I-CTBL 1-(carboethoxy)ethyl 3-[2-chloro-5-(trifluoromethyl) phenoxy] benzoate

DOP dioctyl phthalate

REPRODUCIBILITY

Five different samples of Lot #CTBL 890124, Trailer #909647 (1-17-89) were tested. These samples are methylene chloride solutions.

	% CTBL	% I-CTBL
	60.03	4.92
	60.38	5.06
	60.18	5.04
	60.44	5.08
	60.68	5.16
Average	60.34	5.05
Std. Dev.	0.25	0.09
C of V	0.41	1.72

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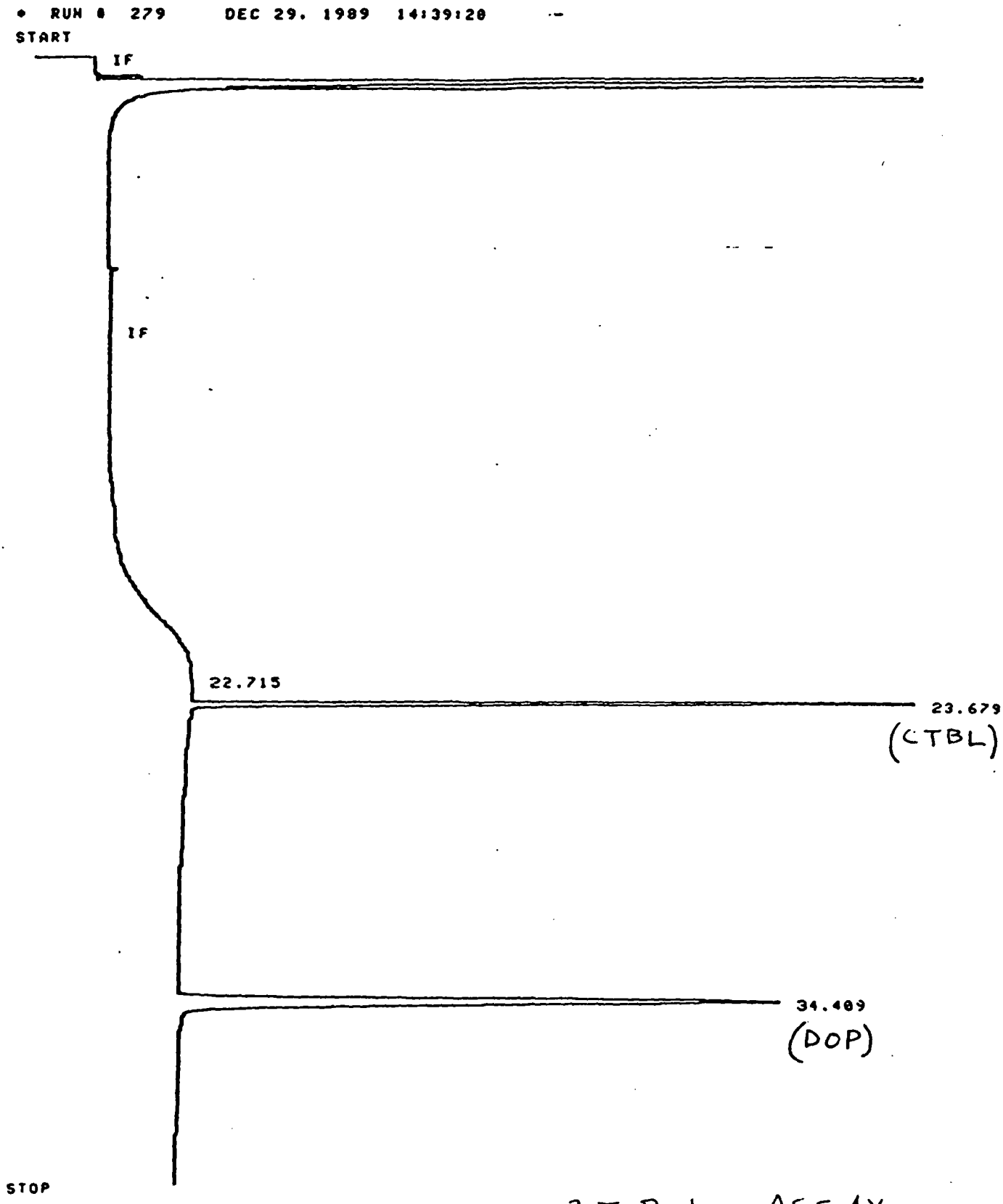
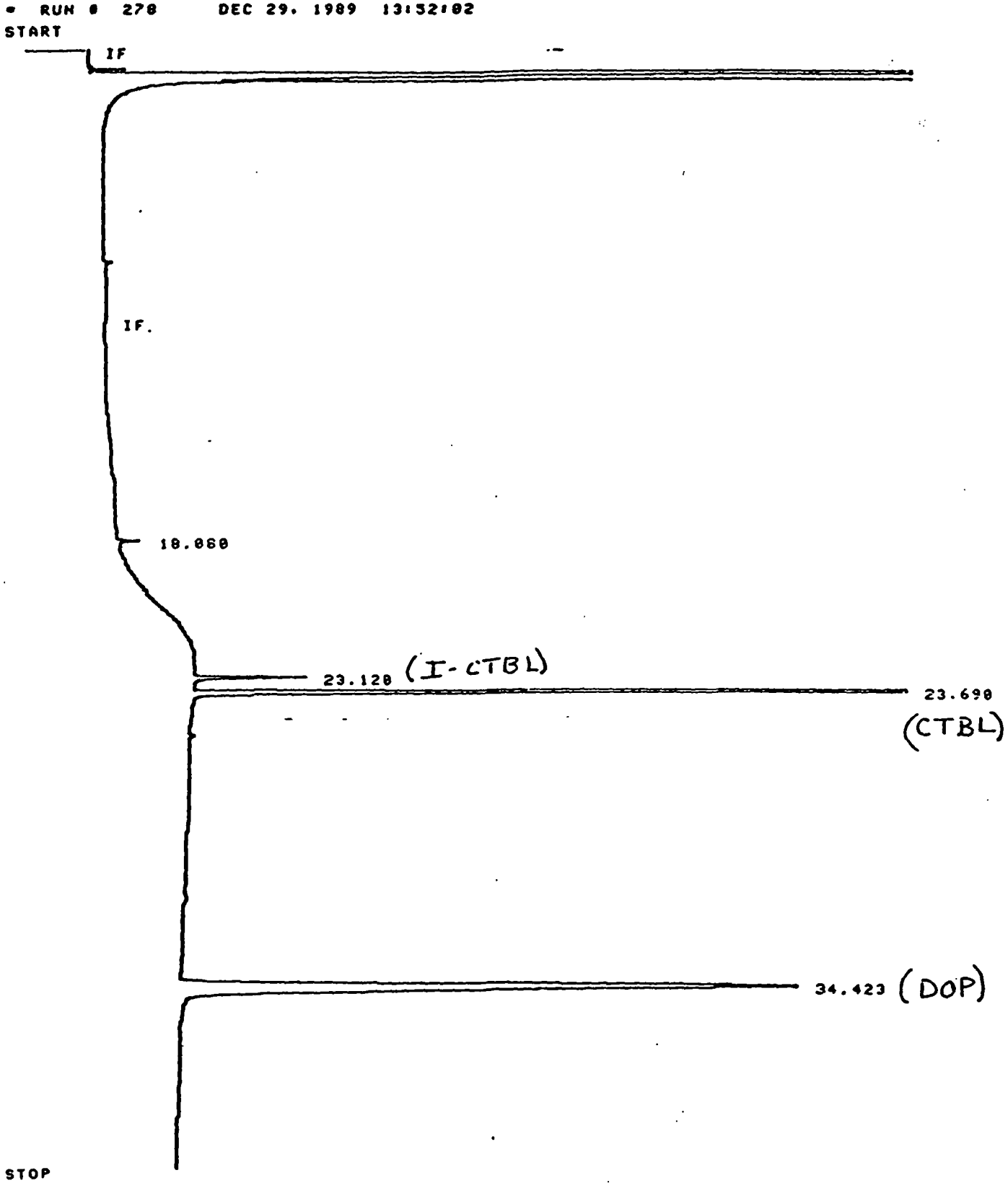


CTBL ASSAY

ANALYTICAL STANDARD



CTBL ASSAY

CTBL TECHNICAL, LOT 49

COBRA METHOD NO: CBR-600

CHEVRON CHEMICAL COMPANY
PROCESS LABORATORY
940 Hensley Street
Richmond, CA 94804

DATE: 12/27/89 (AAC) REVISION DATE:01/08/90

TITLE: DETERMINATION OF SIGNIFICANT IMPURITIES (CTA, CTBA, L-CTBL(I), L-CTBL(II), AND AC-CTBL) RELATED TO CTBL, USING MEGABORE GAS CHROMATOGRAPHY

PURPOSE AND SCOPE

Weighed samples of CTBL (1-(CARBOETHOXY) ETHYL 3-[2-CHLORO-4-(TRIFLUOROMETHYL) PHENOXY] BENZOATE), diluted in acetonitrile, are treated with (N-methyl-N-(tert-butyldimethylsilyl) trifluoroacetamide (MTBSTFA)) which forms a silyl ester with the CTBA, but does not affect the other significant impurities. A known amount of internal standard, dioctylphthalate (DOP), is added. A standard containing known amounts of each impurity is treated similarly. The ratio (area each impurity/area DOP) is measured for both samples and standards. The percent of each impurity is calculated from these ratios and the amount of sample weighed out.

EQUIPMENT

The method was developed with the Hewlett-Packard 5890 GC coupled with a HP 3396A integrator. If other equipment is used, the conditions may need to be altered. See chromatogram for acceptable separations.

REAGENTS

MTBSTFA	Available from Regis Chemical Company, Cat# 270242. Sample is supplied in a septum sealed vial.
Acetonitrile	Reagent Grade
Standards	CTA, CTBA, L-CTBL(I), L-CTBL(II), AC-CTBL
DOP	dioctylphthalate, Eastman # 6479

HP 5890 OPERATING CONDITIONS

Detector	
Type	Flame Ionization
Temperature	300^{0}C

HP 5890 OPERATING CONDITIONS (CONTINUED)

Inlet	
Type	capillary split
Temperature	160°C
Operating Mode	split; purge on
Oven	
Type	Temperature program (1 ramp)
Initial temperature	50°C
Hold time	1 minute
Ramp rate	10°C
Final temperature	250°C
Hold time	20 minutes
Equilibrium time	1 minute
Column	
Type	J&W Durabond megabore
Stationary Phase	DB-5; 1.5 micron thick
Dimensions	30 meters X 0.53 mm ID
Flow rates	
Carrier (He)	15 ml/min.
Hydrogen	30 ml/min.
Air	300 ml/min.
Make-up (Nitrogen)	15 ml/min.
Split vent (He)	75 ml/min.
Septum purge (He)	5 ml/min.
Sample injection	
Type	Syringe with Chaney adapter
Volume	1 microliter

HEWLETT-PACKARD 3396A INTEGRATOR SETTINGS

Zero	1
Attenuation	2
Area Reject	1000
Chart Speed	0.5 cm/min.
Threshold	1
Peak Width	0.10
Integration Start	10 minutes

SAMPLE PREPARATION

INTERNAL STANDARD SOLUTION: Make up a solution containing approximately 0.10 mg of dioctylphthalate (DOP) per ml of acetonitrile.

SAMPLE PREPARATION (CONTINUED)

MIXED IMPURITY REFERENCE STANDARD: Using reference standards of known purities, make up a solution containing (7 mg CTA + 6 mg CTBA + 5 mg L-CTBL (I) + 5 mg L-CTBL (II) + 5 mg AC-CTBL) in 50 ml acetonitrile. A standard solution labeled "CTBL Impurities" is available. It has the following weights in 50 ml acetonitrile.

7.95 mg CTA
6.12 mg CTBA
4.92 mg L-CTBL (I)
5.85 mg L-CTBL (II)
5.44 mg AC-CTBL

IMPURITY STANDARD: Pipet 1 ml "CTBL Impurities" into a vial and add 25 ul MTBSTFA, via syringe. Pipet 1 ml of internal standard solution into the same vial. Cap and shake.

SAMPLES: Accurately weigh out an amount of sample, equivalent to 0.1 g CTBL, into a 50 ml volumetric flask. For technical CTBL (ca. 85% CTBL), this is 1.2 g. For samples of CTBL in methylene chloride (ca. 60% CTBL), it is 1.7 g. Since methylene chloride is so volatile, refrigerate these samples prior to weighing and weigh rapidly. Dilute to volume with acetonitrile. Pipet 1 ml into a vial; add 25 microliters of MTBSTFA; pipet 1 ml of the internal standard solution; cap and shake.

INJECTION SEQUENCE

Inject the reference standard solution until the ratio of AC-CTBL/DOP reproduces within 2%. Inject one to three sample solutions. Reinject the standard solution.

RELATIVE RETENTION TIMES

The retention times relative to DOP are:

CTA	0.52
Derivatized CTBA	0.66
L-CTBL (I)	0.88
L-CTBL (II)	0.90
AC-CTBL	0.93
DOP	1.00 (defined)

Identify the peaks in the "Impurity Standard" and in the samples from the relative retention times. From the areas for each peak, calculate how much of each is present.

CALCULATIONS

$$\% \text{ CTA} = \frac{R(sa) \times W(std) \times \text{purity CTA}}{\text{Avg } R(std) \times W(sa)}$$

CALCULATIONS (CONTINUED)

Avg R(std)	=	average area of CTA in standard divided by average area DOP for the two standard injections
R(sa)	=	area CTA in sample divided by area for DOP
W(std)	=	weight of CTA in mixed standard (ca. 7 mg)
W(sa)	=	weight of CTBL sample (ca. 1,700 mg)
purity	=	% purity of CTA used for reference standard

Use the same type of calculation for derivatized CTBA, L-CTBL (I), L-CTBL (II), and AC-CTBL.

ABBREVIATIONS

CTBA	3-[2-chloro-4-(trifluoromethyl)phenoxy] benzoic acid
CTA	3-[2-chloro-4-(trifluoromethyl)phenoxy] benzaldehyde
CTBL	1-(carboethoxy)ethyl 3-[2-chloro-4-(trifluoromethyl) phenoxy] benzoate
L-CTBL(I)	1-[1-(carboethoxy)carboethoxy] ethyl 3-[2-chloro-4-(trifluoromethyl)phenoxy] benzoate. I isomer
L-CTBL(II)	1-[1-(carboethoxy)carboethoxy] ethyl 3-[2-chloro-4-(trifluoromethyl)phenoxy] benzoate. II isomer
AC-CTBL	[1-(carboethoxy)carboethoxy] methyl 3-[2-chloro-4-(trifluoromethyl)phenoxy] benzoate
DOP	dioctyl phthalate
MTBSTFA	N-methyl-N-(tert-butyldimethylsilyl) trifluoroacetamide

REPRODUCIBILITY

CTBL technical, Lot # 49, was run five times with the following repeatability for the significant impurities.

% CTA	% CTBA	% L-CTBL(I)	% L-CTBL(II)	% AC-CTBL
0.99	0.45	0.70	0.78	0.42
0.95	0.47	0.70	0.77	0.42
0.95	0.45	0.70	0.78	0.42
0.96	0.44	0.70	0.78	0.42
0.96	0.44	0.71	0.80	0.42

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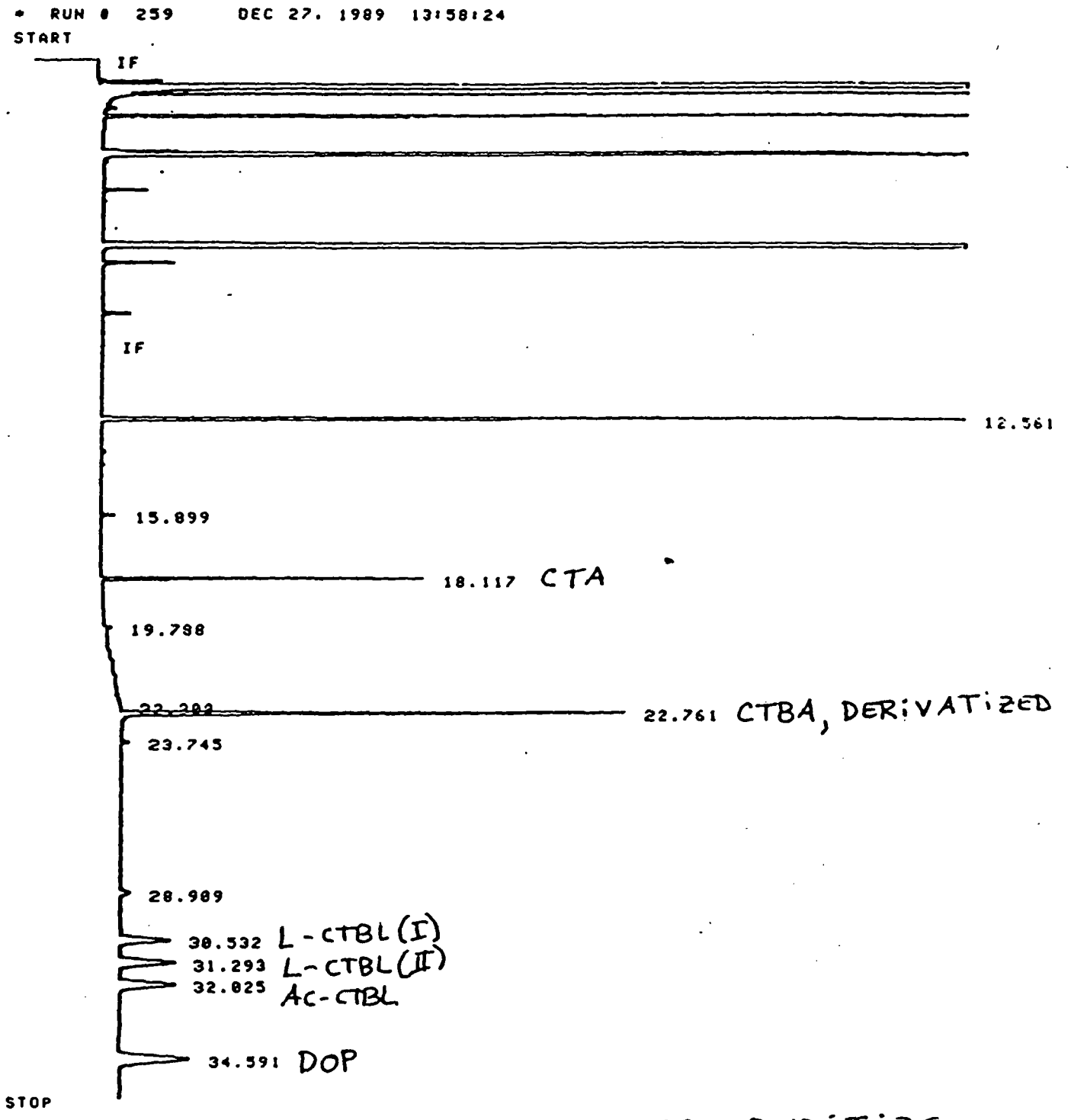
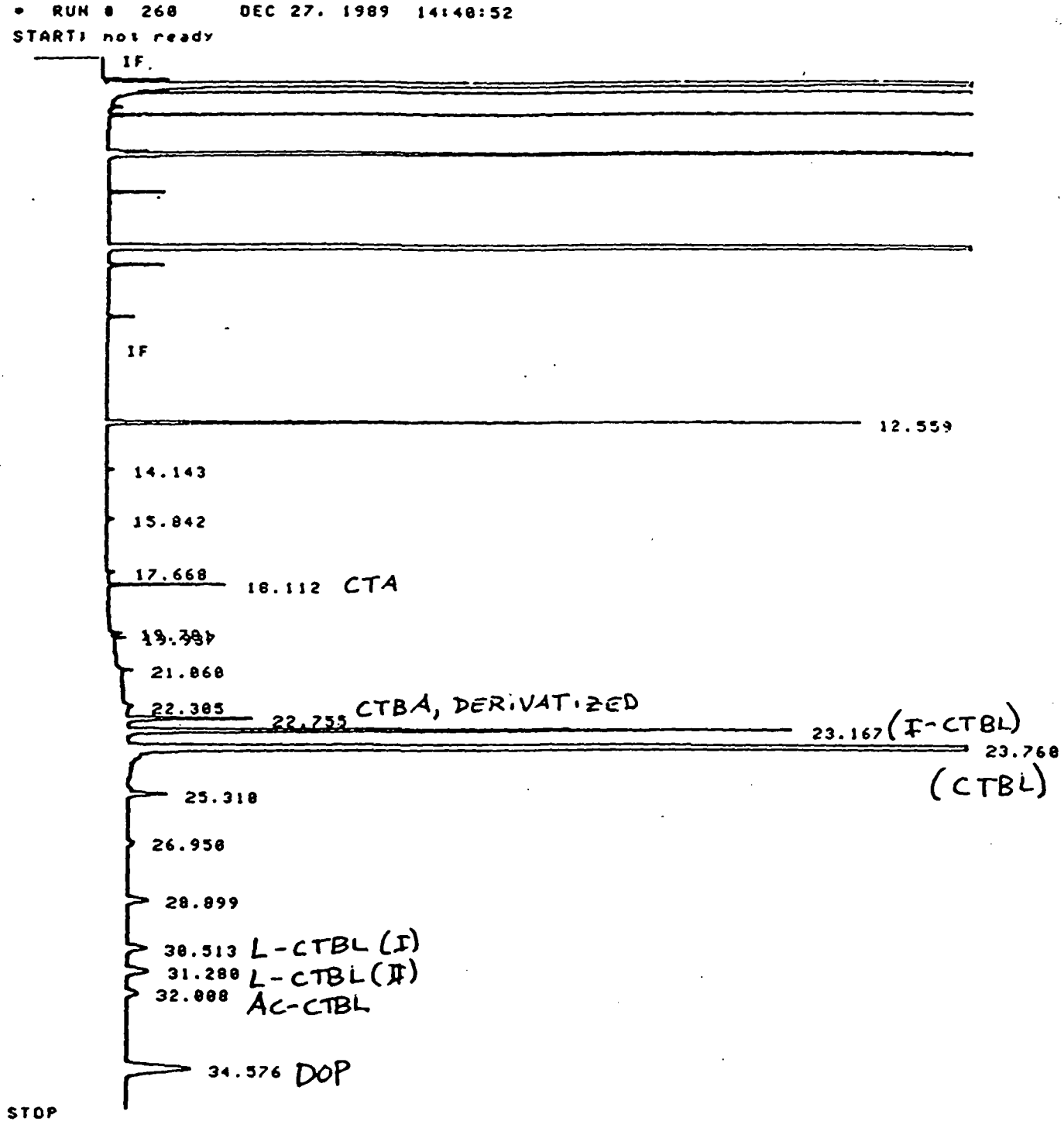


CTBL IMPURITIES

STANDARD MIX



CTBL IMPURITIES

CTBL TECHNICAL, LOT 49

TOLL PROCESSING AGREEMENT

CTBL

INDEX TO EXHIBITS

EXHIBIT A - PRODUCT SPECIFICATIONS

EXHIBIT B - MANUFACTURING SPECIFICATIONS (INCLUDING TARGET USAGE RATIO)

EXHIBIT C - RAW MATERIALS SPECIFICATIONS

EXHIBIT D - PROCEDURE FOR ANALYZING THE RAW MATERIAL CTBL

EXHIBIT E - PLANT PREPARATION AND CLEAN-UP DESCRIPTION

EXHIBIT F - PRELIMINARY P&ID

EXHIBIT G - PROCEDURE FOR ANALYZING PRODUCT

Gene Pearce

Chevron Chemical Company
6001 Bollinger Canyon Road, San Ramon, California
Mail Address: P.O. Box 5047, San Ramon, CA 94583-0947

November 22, 1991

CTBL Toll Contract

RETURN RECEIPT REQUESTED

Cedar Chemical Corporation
Attn: Mr. Geoffrey L. Pratt
5100 Poplar Ave., 24th Floor
Memphis, TN 38137

Dear Geoff:

I am writing to notify you that Chevron Chemical Company has assigned its interest in the CTBL Toll Processing Agreement between Cedar Chemical Corporation and Chevron Chemical Company to Valent. I have enclosed a copy of the executed assignment Agreement between Chevron Chemical Company and Valent for your reference. If you have any questions or comments, please feel free to call. Thank you.

Very truly yours,

J. A. Telljohann

J. A. Telljohann

Enclosure

cc: Mr. D. A. Newell
Mr. T. H. Pickens

ASSIGNMENT AGREEMENT

This Agreement is effective as of September 16, 1991 by and between Chevron Chemical Company ("Chevron") and Valent U.S.A. Corporation ("Valent").

WHEREAS, Chevron is a party to that certain Toll Processing Agreement, CTBL, between Chevron Chemical Company and Cedar Chemical Corporation, dated August 30, 1991 ("Toll Processing Agreement").

WHEREAS, Chevron desires to assign its interest in the Toll Processing Agreement to Valent and Valent is willing to accept such assignment.

NOW, THEREFORE, for good and valuable consideration the parties hereto agree as follows:

1. Chevron hereby transfers and assigns to Valent all of Chevron's rights, and delegates to Valent all of Chevron's obligations under the Toll Processing Agreement.

2. Valent accepts the foregoing assignment, and assumes and agrees to perform all obligations imposed on Chevron by the Toll Processing Agreement.

3. This Assignment shall be governed by the internal laws of the State of California, without reference to conflicts of law principles.

VALENT U.S.A. CORPORATION	CHEVRON CHEMICAL COMPANY
By: E. F. Santos	By: Norman R. Angell
Title: President	Title: Ag. Chem. Div. Manager
Date: November 8, 1991	Date: November 5, 1991

Neil Robbins

CEDAR CHEMICAL CORPORATION

24th Floor • 5100 Poplar Avenue • Memphis, TN 38137 • 901-685-5348

December 9, 1991

Mr. Toshio Sumida
Manager of Technology Administration & Support
Valent
P. O. Box 8025
Walnut Creek, VA 94596-8025

Dear Mr. Sumida:

This letter will confirm our conversation of December 6 regarding separation of the current CTBL production into two campaigns in order to allow the production of material for another Cedar client between the two CTBL campaigns. Valent agrees to the separation providing the following five conditions are met which Cedar has agreed to do:

1. That 22 batches of CTBL will be made in the first production campaign.

2. That the second production campaign for CTBL will commence no later than January 10, 1992.

3. That Cedar agrees to store the two trailers of CTBA/DMSO solution currently in Memphis at Cedar's West Helena site.

4. That Cedar reimburse Valent for additional demurrage incurred on two iso containers of ECP, one tank truck of DMSO and two trailers of CTBA/DMSO solution as a result of the delay in completing the campaign. Any savings to Valent in storage costs for CTBL in trailers due to the maintenance of a lower CTBL inventory at Diaz Chemical Corporation will be used to reduce the cost to Cedar.

5. Cedar and Valent will mutually agree on a fixed fee per unit of CTBL for the second production campaign based upon the current per diem fee and demonstrated production rates in the first campaign. Cedar will reduce this calculated fee by a 10% discount for CTBL produced in the second campaign.

I believe that the above covers the issues we discussed. Please let me know if this differs from our verbal agreement. We certainly appreciate your cooperation in overcoming this difficulty and look forward to a long and mutually beneficial relationship between our two companies. Best wishes to all at Valent for the Holiday Season.

Sincerely,

Geoffrey L. Pratt
Director of Custom Manufacturing

mc

cc: Anita Dale, Valent
Dave Hoppel
Neil Robbins
Randal Tomblin

TO: DAVE HOPPEL
TOM LODICE
MJ POCRASS
JOEL WALKER
GREG SATTERFIELD
JOHN WAGNER

FROM: GENE PEARCE

DATE: SEPTEMBER 15, 1991

SUBJECT: TOLL START-UP FEES

To define our fee structure for toll manufacturing it is necessary to document what charges need to be covered by our overhead, start-up fee, or capital fee.

This has been brought to our attention by Valent's request. They want to know what they are getting for the start-up fee. To aid in this, Geoff has generated the attached start-up list for our review. Please review and give me your comments by 9-18-91.2

Gene

EXHIBIT G

CEDAR'S PLANT STARTUP AND CLEANOUT FEE

The above fee includes the cost of all activities which occurred subsequent to the meeting of May 29, 1991, with Valent representatives at which Cedar and Valent agreed that Cedar would make CTBA in 1991 through 1993 until startup occurs, and excluding activities associated with plant design and modification specifically:

1. Process study leading to written operating procedures.

2. Process safety review.

3. Analytical method confirmation and round robin.

4. Operator training.

5. Plant cleanout and water testing prior to introduction of chemicals.

6. Work on logistics and paperwork for raw material procurement and product shipping.

7. Preparation of record keeping procedures.

8. Application for appropriate construction permits (air).

9. Application for appropriate solid and liquid waste disposal permits and location of disposal site.

10. Cleanout of equipment following the production run and disposal of cleanout materials.

CEDAR INTERNAL CORRESPONDENCE

DATE: 6/14/91

TO: File

FROM: Geoffrey L. Pratt

cc: R. Tomblin
J. Miles
G. Pearce
T. Lodice
N. Robbins

SUBJECT: Cobra Project
Economics 1991

Attached are preliminary economics for a three year Cobra contract under which we would produce CTBL in the fall of 1991 and carry out all four process steps in the years 1992-1994. The basis for the data is:

1. The quantity of lactofen was extracted from the chart provided by Valent.

2. The quantities of intermediates was extracted from my letter of June 15, 1989, to Jim Telljohann at Chevron.

3. The production days were calculated by using the instantaneous production rates provided in the Chevron data package and assuming 50%, 75%, and 85% on-stream factors for the first, second, and third times that each intermediate was run.

4. The production cost was calculated on the basis of $200,000 per month for the first two years, $180,000 per month for 1993, and $160,000 per month for 1994. Five days was added to the listed production days in the calculations to allow for end effects. No inflation is included in the analysis at present.

5. The revenue was calculated by dividing the production plus depreciation costs by a factor of .55.

I would appreciate comments on this analysis, remember we will be operating on a per diem basis until the process has been demonstrated, to provide additional protection for Cedar. No account has been taken of overlapping production which might allow the number of operating days to be reduced. My guess at this moment is that the 91, 93, and 94 prices may be acceptable but 92 may be a little heavy.

Geoffrey L. Pratt

mc

Attachment

Capital M-$ 600

Cobra Project 1991

Year	1991	1992	1993	1994
Production M-lbs				
CTT		259	282	289
CTBA		271	296	303
CTBL	275	339	370	378
Lactofen		308	336	344
Production Time Days				
CTT		66	48	44
CTBA		69	51	46
CTBL	29	24	23	24
Lactofen		84	81	83
Total	29	244	203	196
Production Cost M-$	227	1661	1179	1072
Depreciation M-$		60	60	60
Revenue M-$	413	3130	2253	2059
Gross Profit M-$	186	1468	1074	986
Gross Profit % Sales	45	47	48	48
Operating Profit M-$	186	1408	1014	926
SG&A @ 10% Sales	41	313	225	206
NPBFT M-$	145	1095	789	721
NPAFT M-$	94	712	513	468
Cash Flow M-$	94	772	573	528
Payout M-$	506	-266	-839	-1367
Price / lb	1.50	10.16	6.71	5.98